

# AMERICAN RAILROAD JOURNAL.

## STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

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### American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

Saturday, May 31, 1851.

### Copper Mines of Lake Superior.

Although the mining operations of the Lake Superior region were greatly increased the last year, the amount of copper shipped fell short of the estimates that had been made for the production of the season. This was owing to several causes—the principal one of which was the want of stamp-mills to prepare the fine copper. This at the different mines not provided with the machinery for dressing necessarily remained behind. This was the case especially at the *Minesota*, the mill not being quite ready up to the close of navigation.—The only mills in operation were those of the Cliff mine, North American and North West; and that their shipments were not so large as anticipated is explained by the unusually late period that the navigation remained open in the fall of 1849, thus enabling them to ship off in that year what was calculated upon for the next; and also to the mines

themselves not being so well opened in advance for stoping, as was supposed; hence this work could not be so extensively carried on through the summer. The *Minesota* mine especially was greatly put back by the necessity of taking up the floor of the lower level, in consequence of an error in the laying out of the work. In no instance, that we are aware of, have the mines that were counted upon to produce the amount estimated, failed in consequence of want of sufficient copper. On the contrary, this has been found more and more abundant; and several new mines are now in operation, which during the present year promise to make no small addition to the production of the copper region. The only new one which made a shipment the last year was the *Forest*, on the west side of the Ontanagon, opposite the *Minesota*. The amount of this was 9867 lbs., in masses and barrel work, which yielded 54 per cent. This is the largest quantity that has been shipped by any mine the first year of its operations, with the exception of the *Minesota*. The stamp work is on hand ready for the mill, which will be built this summer.

The following table exhibits the receipts from the different mines at the Sault during the year:  
*Receipts of Copper at Sault Ste. Marie, from the Lake Superior Mines, during the year 1850.*

MINE.	Barrels of "Barrel work."	Bbls. stamps.	No. of masses.	Total.
Cliff.....	883	779	401	128 1222
North American.....	115	220	28	103 651
Minesota.....	70	4	110	129 1164
North West.....	115	96	114	19 394
Sakowet (Isle Royale).....	30	.....	33	5 1693
Forest.....	16	.....	5	2 1676
Copper Falls.....	7	.....	.....	5 57
Pittsburg and Isle Royale.	6	.....	11	.....
Total.....	1103	905	.....	.....

We are not furnished with the per centage that the shipments yielded. The North American, however, did not equal in richness what had been before sent from this mine, and judging from what we saw of the Cliff copper, we should not suppose this to be equal to the copper of the previous year. The published yearly report of this mine we have not yet been able to obtain. The following data we extract from the Cincinnati Gazette:

"The dividend of the year is announced at ten per cent. The product of the year was \$176,129; expenses \$116,855, including the cost of a new steam engine, transportation of it, etc. The No. 1 shaft has been sunk to a depth of 310 feet, and No. 2 to 351 feet. This mine has been worked since 1847, and with an average number of miners of about 60. The total product of the mine up to 1st December, 1850, has been \$658,310. The capital stock paid in is \$110,905, upon which in three years \$204,000 dividends have been paid."

The population of the mining district has increased till it now numbers about 2000, most of whom are laborers. These are insufficient for the demand, and labor commands as high a price as in any part of the country. Facilities for reaching the mines have been greatly increased, and transportation of freight is now at less rates than have before obtained. At each of the mines more or less land has been cleared, and the crops of potatoes, hay, oats, etc., have been very abundant—still, however, far from supplying the demands of the population. The reputation of the climate for salubrity and the restoration of invalids, especially of consumptives, is now well established, and the region is becoming a place of resort for other objects than those connected with the mines.

At this season the boats are thronged with passengers, cattle and horses, and freight. Yesterday (May 17th) the propeller Manhattan left the Sault Ste. Marie with about 200 people, 40 head of cattle and horses, and loaded down with freight. The provision on the upper lake is insufficient for conveying away the supplies which arrive from below. There are now only two propellers running, the Independence being still ashore in Eagle Harbor, but the Monticello, a fine large boat, is on the way over the portage, and will be launched above in about two weeks. This boat will connect with McKnight's line below—meeting the London on her arrival from Detroit, and going directly on

without causing detention at the Sault. Mr. Mc Knight has already employed two other steamers this spring in bringing freight from Detroit; and besides these, belonging to another line, is the fine new steamer *Northerner*. When the *Monticello* and the *Independence* are both afloat on Lake Superior, nothing more can be required for the expeditious conveyance of passengers and freight from Detroit to the mines. It has been suggested, and we hope the scheme will be accomplished, that the lines arrange an "Excursion," at reduced rates, during a month or more in the summer. Many would thus be induced to go up and see the country, who otherwise would not be likely to do so.

A ship canal past the Falls at the foot of the lake seems now to be generally dispaired of, and attention begins to be directed to a private enterprise of connecting Lake Superior with Green Bay by a railroad fifty miles in length, from the mouth of Carp river. This would go through the Iron region, which is filling up almost as rapidly as the copper region. By this road the main supplies could be delivered to the mines with considerable reduction of freight, by reason of less distance of transportation; and also at much less first cost, being purchased along the western shores of Lake Michigan and at Chicago. This would take a large and increasing business away from Detroit, and the State of Michigan, which the mining companies generally would not particularly regret, the State pursuing a very unwise and narrow minded policy in relation to these companies, which are developing its richest resources. By the present Constitution, just adopted, no charters can hereafter be obtained for the transaction of business, except the officers be Michigan men, and these are to be restricted in such a way as to render the charter useless. Already has this law prevented the formation of a company for the clearing out and making navigable for steamboats, the principal river of the upper peninsula; and for a long time must it prevent the establishment of a bank for the accommodation of the mining population, and worse than all of saving-banks, which would save to many a poor miner the hard-earned wages, which now soon find their way to the grog-shops—the curse of the country. It is to be hoped that this upper peninsula, so different in its interests, and so far separated from the lower, may, as the District of Maine, in 1820, was set off from Massachusetts, to which it belonged, also become a distinct territory, or state, in good time, governed by laws, such as have led to the highest prosperity our eastern manufacturing states.

Beside this railroad, in relation to which some progress has already been made, a common road has been opened the last winter, from the Ontanagon to the Wisconsin river, due south about 100 miles. By this road, cattle can be driven through at much less cost than they can be brought in boats from Detroit. A new arrangement for the mail in the winter will probably be made, either by this way, or by Carp river to Green Bay, so that it can be carried through weekly. The interests of the country have become too great for a monthly mail to be longer satisfactory.

In this communication, we will not undertake to notice all the mines which are now in operation. On Keeweenaw Point, as well as on the Ontanagon, many new enterprises were undertaken the last year, some of which we shall, as opportunity offers, describe with some minuteness of detail. Of these, the most prominent on Keeweenaw Point are the following:—*Copper Falls*, which after languishing

for several years, has now made a great start by the discovery last fall of a new vein with extensive ancient works upon it. The discovery was made by Mr. S. W. Hill, who is now directing the operations there.

The *Eureka*, *Zeolite*, *Phoenix*, *North Western*, *Iron City* and *Cape* are all actively prosecuted, and have all taken out more or less copper; but none of them are provided with stamp mills.

Near Portage Lake some new operations have been carried on during the winter, of the success of which we know nothing.

In the Ontanagon region we understand that the *Forest*, *Farm*, *Adventure*, *Aztec*, *Ridge*, *Peninsula*, *Norwich* and *Trap Rock* have all copper ready for shipment. Neither of these is furnished with a stamp mill.

The country is covered with squatters, who have secured pre-emption rights to all the promising tracts on the mineral range, not otherwise taken up.

In our next communication, we will give a particular account of the *Peninsula mine*. H.

#### The Wilmington and Manchester Railroad.

As we have not been favored with a copy of the recent report of the above company, we give the following extract from it, copied from one of our southern exchanges. This company has recently been engaged in negotiating in this market, and we are happy to learn successfully, bonds to a sufficient amount to purchase the iron and equipment for their road. It is a most important line, and will exert a very favorable influence upon all our southern roads when it shall be opened, which will be in less than two years.

The Wilmington and Manchester railroad, now in progress from Wilmington, N. C., the terminus of the Wilmington and Raleigh railroad, (now in operation), to the Camden branch of the S. C. railroad, (also in operation), near Manchester, S. C., a distance of 162 miles.

By means of this road, the great chain of railroads along the Atlantic coast, from Montgomery, Ala., to the northern cities, will be complete, and the disagreeable sea route between Wilmington and Charleston, S. C., so much dreaded and deprecated by the travelling public, dispensed with.

Besides, in taking the place of the Wilmington boats, it must inevitably be substituted in their stead, for the transportation of the main northern and southern mail, a change now greatly desired by the post-office department, and the public generally; and especially so by the Wilmington and Raleigh railroad company, who are anxious to dispense with their boat line, heretofore and still entailing upon them a heavy expense, and but little profit.

The transportation by this road, of the mail, will shorten the schedule time from New York to Augusta, Ga., about nineteen hours, assuming that the rest of the present route in connexion with it, is retained; but by some modifications of the schedule, much more time may be saved, and so soon as the Georgia railroad connects with the Montgomery, Ala., (the work on which is now progressing in a manner that puts its completion beyond doubt within the next twelve months,) the saving of time from New York to New Orleans would be from sixty to seventy hours.

The position of this road, its connections north and south, its easy grades, freedom from curves, and consequently cheap construction, is such as to put it beyond the competition of any other route for the mail and travel between New Orleans and New York. This consideration has great weight in the original undertaking, and has given confidence to its stockholders and friends ever since.

By an examination of the map, it will be seen how the extensions south and west of the Georgia roads are progressing; and as these avenues of travel are opened, the lateral branches multiplied, and the intercourse between that country and the

northern cities increased, the amount of travel which must pass over this road as the great trunk line from north and south, cannot now be fairly estimated by any comparison which can be drawn from the present business of the connecting lines now in operation on either side of it.

The route selected for the railroad between Wilmington and Manchester is direct and level, shorter than any road now travelled. One hundred and fifty-four miles of the distance is made up of straight lines, connected by easy curves; only eight miles of curves occur in the whole distance, and four and a-half miles of this is in descending the grade at the junction with the South Carolina railroad.

In no instance is the grade over thirty feet per mile, and this for a short distance in particular localities.

From the crossing of the great Pee Dee River, in South Carolina, to Wilmington, a distance of ninety-five miles, the greatest resistance encountered in the direction of the greatest traffic, is that due to a grade of fifteen feet per mile, and this line, with few exceptions, a straight one.

This road occupies an intermediate position at its crossing of the great Pee Dee River with Cheraw, (the head of navigation of that river,) and the sea coast, being about forty miles distant from the former and from fifty to sixty miles of the latter.

The country through which it is located in South Carolina, (some ninety-five miles,) is uniformly fertile, producing cotton and corn in great abundance, and much of it well adapted to wheat. It is so located as to be within twenty miles of the extreme of the productive cotton region below it, and lies below that region along the valley of the great Pee Dee and its tributaries, the only outlet to market for which is the great Pee Dee River, which is not generally navigable for steamers from June to the middle of November, but light boats used as lighters from Cheraw to the crossing of the road can be ordinarily used throughout the entire season.

Once in operation, it will command the whole trade of the Pee Dee country as well as a portion of the valley on the Wateree, as the cost of transportation will not be equal to the freights on the rivers, which at the most important season to the cotton planters, (the coming in of the new crop) are too low for navigation.

Accurate estimates from the census recently taken, and from the actual receipts of cotton in Charleston during the season of 1849-50, from the Pee Dee steamers, show that the country through which this road runs in South Carolina, and that tributary to it for transportation, produced in 1849 some 70,000 bales of cotton, averaging 450 pounds each. This production, large as it may seem, will in a few years be increased considerably, as valuable bodies of land are being prepared and sought for along portions of the line hitherto neglected, for want of facilities of transportation to market, except at great expense.

In that portion of North Carolina traversed by this road contiguous to South Carolina, the soil is equally adapted to the cultivation of cotton, but has not hitherto been used for that purpose, owing to its distance from market and the means of reaching it.

The whole line in that State, however, is through a thick forest of the best pine, well adapted to the making of naval stores, as also affording the best timber for lumber and shipping purposes, or at least as good as can be found in the South.

#### Railroads.

The *New Haven Palladium*, in an article on the census of the State gives the following results, showing the effect of railroads upon the increase of population. It says:—

The very gratifying gain in Connecticut, greater than for the previous forty years, is due in a great measure, if not entirely, to the railroads which now traverse almost every part of the State. If we examine the returns from the inland towns we will find that those lying on the line of railroads have increased largely, while others with equal natural advantages, have either lost or made very small gains. Take for instance the Housatonic railroad. The towns through which it passes have gained six thousand, while the corresponding range of towns on the east, have gained less than two hun-



ded. The towns on the Norwich and Worcester railroad have gained five thousand, and the adjoining tier of towns about two hundred and fifty. So, also those counties where there are the most railroads, have increased much faster than other towns equally well situated. New Haven has gained thirty-six per cent, while New London has only increased fourteen, Hartford twenty-six and Tolland eleven, Fairfield twenty, and Middlesex eleven.

#### Lehigh Coal and Navigation Company.

We learn from the Pottsville Mining Register, that the last report of the directors of this company indicates a steady improvement in their affairs. The shipments from the company's mines last season was 424,258 tons, and from all other sources 298,364 tons, making an aggregate of 722,622 tons. Of this amount 89,100 tons went into the Morris Canal; 503,323 tons passed into the Delaware division, and 117,119 tons were used on the line of the Lehigh. The shipments of lumber for the season exceeds forty-one and a half millions feet. Notwithstanding the interruptions mentioned, the amount of arrears of interest provided for in coal, reaches \$398,175, being \$135,410 more than payments on same account in 1849. The principal items of profit for the past year, may be briefly stated as follows:—Net profits from tolls \$353,130 57; from coal, \$221,219 30; from ground and water rents, and lots sold, \$32,826 39. The first of the above items shows a slight falling off; the others a considerable improvement on the corresponding items for 1849. The balance to the credit of profit and loss is \$140,501 61. The disposition of the profits is accounted for by the increase of \$104,118 54 in the assets, and the decrease of \$36,383 07 in the indebtedness of the company.

The report alludes to the reduction of carrying rates on the Schuylkill and other regions, and assumes that relatively none of the mining districts have profited by the reduction, the consumer alone having been benefitted—and the market unnecessarily disturbed and unsettled; but, thus far, they say they have found sales at last year's prices, for a large proportion of all that will probably be brought from the company's mines during the present season. They say the extent of their production will only be limited by the facilities for transportation. Their boat capacity is set down at 900,000 tons for the season. The company's debt was decreased the year \$36 383, leaving obligations to the amount of \$5,712,770, on the first of January last. The whole amount of the capital stock of the company is \$5,503,550; being 30,071 shares of \$50 each.

#### Virginia and her Resources.

The following article, copied from the National Intelligencer, will be read with interest. There are but few, we think, who will not be surprised at the exhibit which is here presented of the solid wealth of the "old dominion." The statistical details which go to make up the large aggregate of the resources of the State are derived from the most reliable data, and therefore leave no room for doubt as to their accuracy. The writer of the letter of inquiry which elicited these statements is the Hon. William Selden, of the banking house of Selden, Withers & Co., Washington:—

For the information of our readers, we publish the interesting letter furnished by the Superintendent of the Census Bureau of the United States.—These candid statistics, founded on official returns, which the act of Congress requires, will convince all who read them that the power and resources of this noble commonwealth are very great:

"CENSUS OFFICE, Washington, May 9, 1851.

"Sir—In reply to your letter I may state that, although not prepared to furnish an exact detailed statement of the value of the real estate and personal property in the State of Virginia, the returns have been examined sufficiently to warrant me in stating that the value of real estate

May be put at.....	\$278,000,000
Value of slaves.....	147,000,000
Other personal estate.....	105,000,000
	<b>\$530,000,000</b>

"That there is this amount of wealth in the State of Virginia I have no doubt; and the official result, when fully obtained, if it varies from the above, will exceed it rather than fall short. Estimates have lately been made, placing the amount at \$800,000,000, which I think too great, arising from a too frequent recapitulation of the same capital in different hands—a kind of estimate frequently made, though producing erroneous conclusions, to explain the fallacy of which would require more time than I can now spare, and which to you would be unnecessary and superfluous.

"Very respectfully your obedient servant,  
"JOS. C. G. KENNEDY,  
"Superintendent Census.

"Hon. Wm. Selden."

Whilst on this subject, it may be well to report the substance of some other statistics lately furnished by the functionaries of Virginia, showing the debt, liabilities and resources of that commonwealth.

The official statement lately made to Virginia by her able second auditor, Mr. Brown, shows that—

On the 30th September last the public debt of the State, held by individual and private companies was	\$9,035,189 30
Of this debt there is held in Great Britain.....	\$2,369,989 20
In France and Germany.....	368,300 00
Total in Europe.....	2,738,289 20
In Virginia.....	\$5,651,461 10
In Maryland.....	392,139 00
In the District of Columbia.....	110,400 00
In other States.....	142,900 00
Total in the United States.....	6,296,900 10

Aggregate amount in all.....	9,035,189 30
The same statement shows the apparent liabilities of Virginia for guaranteed bonds issued by companies and corporations to complete her improvements.....	9,425,762 49
Total debt and liabilities of the State.....	18,460,951 79
The same statement shows the present value of stocks owned by the State to be.....	\$7,060,565 48
And the value of her stocks that will soon be productive.....	4,801,677 91
	<b>11,862,243 39</b>
	<b>\$6,598,708 40</b>

The finance committee of the House of Delegates lately examined the statistics of the auditor, and, after a careful and laborious investigation, proved his figures and estimates to be correct—as will appear by House Document No. 9—"upon the debt, revenue and expenditures of the government."

But the finance committee clearly showed that \$844,000 of the apparent liability of the State would never be real, as private subscribers had not complied with the conditions upon which the State agreed to subscribe.

But let us suppose, for round figures, that the indebtedness of Virginia is \$6,500,000, or that that is the amount for which she is required to provide an annual interest, and what a trifle does it seem, when rated by the magnitude of her various and ample means.

The State, well knowing this, did, on the 29th of March last, pass a law to authorize the board of public works to borrow, on her credit, four millions of dollars to complete her useful works of internal improvement, and from which a greatly augmented income will be the necessary consequence.

To effect this, the State is about to issue coupon bonds, which will avoid the old trammels which fetter the transfer and negotiability of public stocks. They will run for thirty-five years, and pass from vendor to vendee as often as the seller and purchaser shall desire, without the troublesome formality of assignment and transfer on the

records of the government. The bonds will carry six per cent interest per annum, payable half-yearly in Washington, New York, or wherever the agents and the purchasers of the bonds shall prefer the money to be paid. That the bonds may come within the means of all who desire to purchase them, they will be issued in denominations of from five thousand to five hundred dollars.

To the honor of Virginia, it affords us pleasure to refer to the fact that she has never repudiated nor deferred the payment of her public debt; that she has ample means to discharge every pecuniary obligation into which she could be induced to enter; and that she has recorded her solemn word, upon imperishable statutes, that she never will fail to pay her debts.

#### Lake Superior Copper Mines.

The copper mines of Lake Superior are fast getting to be one of the most important mining interest in the United States, and we hope during the present season to be able to present to our readers frequent accounts from them, through one Mr. Hodge, who left here some time since for that quarter, who will spend the season there superintending the operations of some of the most important mines. In absence of any letter from him, we herewith present the following account of the operations of the past winter, taken from the first number of the Lake Superior Journal, which has appeared this spring, after a hibernation of six months in the frosty regions of Lake Superior:

The mines on Keewenaw Point during the past winter have been vigorously worked, and have produced a large amount of mineral. The Cliff Mine will probably ship one thousand tons during the season of navigation of 1851. The North American will ship by first boat about one hundred tons, and the North West will have ready for shipping about the same amount. The mineral taken from the mines the past winter is of a superior quality, being less encumbered with rock than any other ever sent to market. The annual expenditures at the Cliff amounts to about eighty five thousand dollars—at the North American forty-two thousand dollars, and at the North West, about sixty-two thousand dollars. The number of men employed at the first mentioned mine is one hundred and eighty; at the North American, one hundred and ten, and at the North West, one hundred and forty. The character of the mineral taken from these mines is masses, barrel and stamp ore, which, when properly prepared for market, will yield about seventy per cent pure copper. The Cliff dividend is five dollars per share, payable first of February, and five dollars payable on the first day of August—this is declaring sixty thousand dollars on the year's business, and laying away a large sum to their "fund." The North American and North West Mining Companies are prepared to erect machinery for a more extensive operation in their business, and while the debt made by this outlay is liquidated by the present yield of these mines, it is confidently believed that when facilities sufficiently extensive to open them are obtained, their dividends will be second to but few made in the country. The success which has attended the labors of the above mentioned companies (and a few others, which I have not now time to mention) has encouraged men of capital to invest largely in mineral lands upon which new companies have been formed, many of which are now worked under favorable circumstances. The names of the new mines now in operation, are the Iron City, Cape, Agate Harbor, North Western, Zeolyte and Eureka. The names of those which will be opened during the spring are the Star, Grotiot, Winthrop and Dana, all of which are supposed to be good locations. The old Eagle River Works has assumed the name of Phoenix Copper Company, and is being carried on with energy by S. Mandelbaum, Esq., and under very favorable auspices. The Copper Falls Mining Company are prosecuting their works upon new veins discovered last fall by S. W. Hill, Esq. At the time Mr. Hill commenced his explorations, the stock of this company was held at three dollars per share, and but little changed hands at that price, as the mine had long been worked with no very cheering

prospects; but now, so favorable are the indications at this mine, that the stock is held at fifty dollars per share. Recent explorations abundantly prove that other mines equally as rich as the Cliff will soon be opened, as the explorers have been diligently employed in the examination of veins, and have discovered many, the surface appearance of which exhibits as favorable indications of there being a mine as was discovered on the Cliff location when first explored. Those mines that have been thoroughly opened, owe their success to the energetic perseverance of men who battled against the difficulties incident to opening a mine without experimental knowledge; giving their money to carry on extensive works which, at the time, could not have been considered any other than a hazardous undertaking.

The Minnesota mine is, to the mines of the Ontonagon, what the Cliff is to those of Keewenaw Point, far in advance of all others. This company have employed, during the winter, about 150 men—have extended their first level about 1000 feet—have sunk three shafts to the depth of 160, one 1000 feet, and opened the second level about 500 feet. They have also opened a new vein 30 feet north of the original works, by a cross cut at 1st and 2nd level, which is proving exceedingly rich.

They have now commenced stoping, which produces mass copper and rich stamp work in all parts of the mine, some of these masses, now exposed, are estimated at *forty tons each*. For the amount of labor and capital expended on this mine, it has no equal for results in this or in any country. This company will probably produce 500 tons for shipment this season.

The Peninsula Mine has been opened to the depth of eighty feet, producing copper from the shaft and proving an exceedingly rich vein. This company have had at work only a small number of men, but expect to ship about ten tons of copper this season. Considering the light cost of working their mine since commencing operations, and the favorable locality, it bids fair to take rank among the best mines on the lake.

Extensive explorations are in progress on the Minnesota location, with a view of greatly enlarging their works during the present season, or to the forming of new companies for the development of its wealth.

The Forest mining company, on the west side of the river Ontonagon has been working about thirty men and have extensively opened their mine during the winter. The ground is proving rich in mass and stamp work, and they will have considerable for shipment. The company are preparing to erect a stamp mill and saw mill, and to make other extensive improvements to forward their works.

The Adventure company have also raised, and have ready for shipment about fifteen tons of copper and are making preparations for extending their works. Other mines in the neighborhood (of which more hereafter) are opening ground and making improvements with a view to a full development of their value. Many new tracts of land have been located with great expectations as to their richness, and the condition of the mines generally is decidedly favorable.

Aside from the mines, improvements are going forward in every part of the country; roads are being made, lands cleared, and houses built. At the mouth of the river we have already quite a village, the largest place on the lake. There is a good demand for labor and fair wages.

#### Railroad between Cincinnati & Baltimore.

The president of the Baltimore and Ohio railroad company, Hon. Thomas Swann, on the occasion of his being in Cincinnati, was addressed by the president of the City Council, who submitted the following inquiries:—

1st. Whether it is the purpose of the Baltimore and Ohio railroad company to make the road from Parkersburg to the Tygart's Valley Bridge under the north western charter; if not, whether there will be any prospect of its being taken up by individuals capable of constructing it?

2nd. When the Baltimore and Ohio railroad is expected to be completed to the city of Wheeling?

3d. Whether you would feel at liberty to express an opinion in relation to the differences now exist-

ing between the Hillsborough and Cincinnati and Belpre companies—the object being to secure harmony and united action on the part of said companies in the vigorous prosecution of the thorough line?

4th. Mr. Swann was also requested to give his views tending to illustrate the importance of such a communication as that offered by the Cincinnati and Parkersburg road, which may occur to you as important to a thorough understanding of the subject, or useful to our citizens.

In reply Mr. Swann states:—

By the provisions of the new code of Virginia, the company over which I preside might exercise the right to subscribe to the stock of the northwestern railroad; but they have not been invited to do so by the terms of the charter passed by the Legislature of Virginia, and it might well be doubted whether, with the invitation extended to them, such a step would be deemed prudent or advisable in the face of the heavy expenditures under which they are now laboring, in the prosecution of their own work to the city of Wheeling, in accordance with the provisions of the law of 1847.

At the same time, however, that I deem it proper to make this explanation, in order to account for any apparent want of interest on the part of the Baltimore and Ohio railroad company, in the objects and purposes of the Parkersburg charter I am free to express the individual opinion which I have been led to entertain, that the northwestern road, connecting Parkersburg with the main stem of the Baltimore and Ohio railroad at the Tygart's Valley Bridge—a distance of one hundred and twenty miles from the Ohio river—will be made by the citizens of Baltimore under the independent charter granted by the Legislature of Virginia, whenever the indications from this quarter are such as to justify action on their part, and an appeal shall be made to them for aid and co-operation by those who have it in charge.

The city of Baltimore cannot look with indifference upon the important developments now going forward west of the Ohio river. Situated at the head of one of the most prominent tributaries of the Atlantic ocean, she depends mainly upon you for the supplies, by which she is to accomplish those cherished plans of commercial greatness and prosperity, which have so long stimulated the efforts of her citizens in the prosecution of a connexion with the resources of the great west. If she should fail in these well-founded expectations, it will be attributable, you may rest assured, to no want of energy or activity on her part. Her past history abundantly shows that she has been steadily pressing forward in the accomplishment of her favorite object.

When you ask me, then, if I entertain the opinion that the connecting link from the point of intersection with the Baltimore and Ohio railroad, to Parkersburg, will be made by the people of Baltimore, I answer emphatically in the affirmative, and I have been brought to this conclusion from the interest which I know to be felt by the people of that city, and the efforts which must be made on both sides of the Ohio river, by Cincinnati on the one hand and Baltimore on the other, to perfect the greatest line of communication which has heretofore marked the progress of internal improvement in this country.

The line of the Baltimore and Ohio railroad, as at present located, begins to diverge from its most direct route to Cincinnati and St. Louis, at a point where the northwestern road is authorized to make its junction at or near the mouth of Three Forks Creek. From the point of intersection to Parkersburg, and thence by the Cincinnati and Belpre road, to Cincinnati, is almost a straight line. The route is one of easy gradients—traversing the valleys of streams, and passing for more than two-thirds of its entire length, through a rich and productive agricultural region. Intersecting the Ohio river at a point navigable in all stages of water, the northwestern road must secure to the city of Baltimore without rivalry, the monopoly of that great thoroughfare; and pointing in a direct line to Cincinnati and St. Louis, it will form part of the grand national highway for the whole interme-

diate country between the Atlantic and the Pacific coasts.

To Cincinnati it would be difficult to estimate the commercial advantages which must necessarily accrue from such a connexion. By no other line could trade and travel find an outlet to the seaboard within the same limit as to time, or with equal facilities in the mode and cost of transportation. The roads projected with a view to extreme northern connexions would soon become tributary to her advancement, and the streams which are now flowing onward to distant markets, would be thrown back upon her as the common point of shipment and distribution.

To illustrate this view, I would invite your attention to one or two facts.

The total distance from Baltimore to Cumberland by the finished road, is..... 179 miles.  
From Cumberland to the mouth of  
Three Forks Creek..... 103 "  
From Three Forks Creek to Parkers-  
burgh..... 120 "  
From Parkersburg to Cincinnati..... 185 "  
587  
From which deduct saving on B. and  
O. R. R., by proposed second track, 11

Total distance from Baltimore to Cincinnati ..... 576

We have then a total distance from Baltimore to Cincinnati by the northwestern railroad, and the Cincinnati and Belpre road, of 576 miles, and the time required in the transit between these points would be little more than twenty-four hours.

The line will be shorter by upwards of one hundred miles than any other which can be brought into comparison with it, and it is susceptible of the clearest demonstration that a traveller in St. Louis or Cincinnati, destined for Philadelphia, or New York, or Boston, would find it more convenient, economical and expeditious, to approach those cities *through Baltimore*, than by any other existing or projected line of railway communication.

Then as to Philadelphia and New York:

The distance from Philadelphia to Cincinnati, by the Pennsylvania railroad to Pittsburg, and the Pennsylvania and Ohio road to Cincinnati, is..... 737 miles.  
The distance from Philadelphia to Cincinnati by Baltimore, Wheeling and the central Ohio railroad through Columbia, is..... 739 miles.  
The distance from Philadelphia to Cincinnati by the contemplated Hempfield route, is..... 678 miles.  
The distance from Cincinnati to New York by the Columbus and Cleveland road, and the New York and Erie road, is..... 870 miles.

Showing that the city of Baltimore is nearer to Cincinnati, by the Cincinnati and Belpre road and the road from Parkersburg to Baltimore, by *one hundred and two miles*, than by the shortest of the routes above enumerated, which may be brought into comparison with it. In estimating the distance between Philadelphia and Pittsburg, I have assumed the estimate of Gen. Packer, as referred to by him in his speech in the Pennsylvania Senate.

#### Ohio.

**Lake Shore Railroad.**—We learn that the Cleveland, Painesville and Ashtabula railroad company, (Lake Shore road), has negotiated with Messrs. Winslow, Lanier & Co. a sale of \$100,000 of the city of Cleveland seven per cent. Bonds, payable in ten years, interest payable 1st May and 1st November in this city, redeemable in this city in 1861, principal and interest being guaranteed by the railroad company. These Bonds were issued by the city of Cleveland in payment of a subscription of like amount to the stock of the railroad company, which subscription was made by authority of an act of the Legislature, and the same assumed and confirmed by the votes of a large majority of the citizens. The act requires an annual tax to be levied on the entire property of the city sufficient to



pay the interest, and also provides for a sinking fund. The taxable property of the city is about \$5,000,000; population about 20,000; total debt of the city, including these bonds, about \$400,000, against which the city own valuable and productive property to an equal amount.

The railroad company have a large cash subscription to their stock, nearly sufficient to complete the road, and which is constantly being increased. The road is in a very forward state. A portion of the iron is on hand, and the track from Cleveland to the Pennsylvania state line, will be in operation during the present year.

**Dayton and Western Railway.**—The electors of the city of Dayton, have voted by a majority of six hundred and eighty-eight, to lend the bonds of the city for \$50,000 to the Dayton and Western railroad company, to enable them to finish their road into the city.

#### Georgia.

**The Railroad Connection.**—For the information of persons abroad, it may be well to state that the work of connecting the several railroads through this city, is now rapidly progressing. The grading, bridging, superstructure, &c., are all under contract, and will be completed in time for the growing crop. A portion of the granite for the piers of the bridge has already been delivered, and there is now a full force of workmen in the quarries. Every thing seems to be progressing finely, and we hope that by the time designated for holding the State Fair the work may be completed.—*Macon Journal.*

#### Railroad Convention.

A convention of all those interested in the completion of the line of railroad between the Erie railroad and the city of Baltimore, will be held at Georgetown, in Northumberland county, (Pa.) on Tuesday, the third of June. This is an important movement, and we hope to see Baltimore fully represented in this, as in all similar conventions, having this great object in view.—*Patriot.*

#### Illinois Canal.

The trustees of the Illinois and Michigan Canal have recently had a meeting in Chicago, at which they made the following regulations of tolls:—

A reduction of ten per cent. upon the weight of corn in the ear, to take effect the first of June.

To charge no tolls on the Calumet Feeder after the close of the present month.

A change in the mode of collecting drawbacks, making the same payable to the consignor or his order.

This reduction in the weight of corn in the ear is to relieve the owners of corn who wish to have it shelled by machinery in Chicago, from paying toll on the cob.

#### Pennsylvania.

**Railroad from Erie to the Ohio State Line.**—We learn, says the Pittsburgh Gazette, from a letter of John Galbraith, Esq., president of the Franklin Canal company, which is engaged in the construction of a railroad from the Erie to the Ohio state line, that the company has located its road, after a careful survey, between Erie and the Ohio line; that the right of way has been obtained from the land owners for seven-eighths or more of the whole distance, some paid for in cash, some in agreements to be paid for when possession is taken, others at a future day, and some in certificates of stock in the company issued and delivered; that a contract has been entered into with the Cleveland, Painesville, and Ashtabula railroad company, for a union of the

two companies on a four foot ten inch gauge, the entire distance between Cleveland and Erie, extensive and minute in its details, highly advantageous to the entire line, and mutually so to both companies, and irrevocable but upon the consent of both, based upon just and honorable principles, and contributing largely to the successful prosecution of the work, and bringing with it important aid and influence for extensive western interests. In pursuance of this contract, a mortgage has been executed by the Franklin Canal company upon its entire road between Erie and the Ohio line to secure the payment of four hundred bonds of one thousand dollars each, executed by the Franklin Canal company, payable on the first of February, 1864, with seven per cent. interest, payable semi annually, and further secured by the guarantee of the Cleveland, Painesville and Ashtabula railroad company; one hundred and thirty of these bonds have been negotiated in the purchase of iron rail and money to prosecute the work, and a negotiation is most probably completed by which a large portion of the remainder of the bonds will be transferred for money, at par, for the prosecution of the work. In December last, the entire division between the Erie and Ohio line, was put under contract at cash prices to responsible and energetic contractors, who have been prosecuting the work with as much rapidity as circumstances would enable them to do, and who have made all their arrangements for a vigorous prosecution of the entire work, and from the arrangements which have been made, Mr. Galbraith is confident that the work will be completed, and stocked and ready for active business, much within a year from this time, indeed by the first of January. Grounds for the depots have also been purchased, partly by payments in money, and partly by agreements for the payment in money hereafter.

#### Virginia.

The Lynchburg Virginian says that two thousand men are at present employed on the Lynchburg and Tennessee railroad, and the first sixty-four miles are expected to be opened during the present year. The second division, from Salem to Wytteville, is nearly all under contract, to be finished by the close of 1852. The third division, ending at the Tennessee line, will be put under contract in the fall, and is expected to be in operation before the end of 1853.

#### New York.

The Rochester American states that a meeting of directors of the Genesee Valley railroad has been held in that city. A survey has been made on each side of the river by the engineer of the company. Both routes are exceedingly easy, and no decision has yet been made between them. The road, it is stated, can be built and completed in the best manner from Rochester to Dansville, a distance of forty five miles for \$600,000. A thorough travel each day of 300 (150 each way) would ensure paying dividends on this capital. From Dansville a connection can be made with the Conhocton and Buffalo road, and with the Attica and Hornellsville road, the distance in the first case being seven and in the latter ten miles. It is expected that Rochester will carry the road as far south as Avon. To do this will require a subscription of \$300,000.

**Albany and Susquehanna Railroad.**—We see it stated that Mr. Delevan, of Albany, President of the above company, has taken \$40,000 of the stock of the Albany and Binghamton road, and other citizens of that place have made liberal subscriptions. The grades are reported to be favorable—not ex-

ceeding forty feet to the mile in any place, and not exceeding eight feet to the mile for a long distance. It is intended to construct this road with a six feet track, and to run the freight cars through from Albany to Dunkirk, without transshipment at Binghamton. The coal trains will also be loaded at the Liggett's Gap mines for Albany at a rate which will enable the company to deliver coal in Albany at \$2 50 per ton.

#### The Ohio and Mississippi Railroad.

The Cincinnati Daily Commercial, of the 5th inst., in speaking of the progress that is making with the subscriptions to the stock of the Ohio and Mississippi railroad company, says that on Saturday afternoon last, at a meeting of the directors of the company, eighty thousand dollars of stock were subscribed in one hour, by eight persons, all of them directors and officers. This is an emphatic endorsement of the enterprise, as the officers and directors are presumed to have a knowledge of the advantages and practicability of the route. Of course this subscription will be followed by others, so that we may say the thing is settled, and that the road will soon be completed to Vincennes.

One hundred thousand dollars has been subscribed by individuals in St. Louis to the above, with a prospect of a large increase. The best feeling prevails, not only at St. Louis, but through Illinois; and entire confidence is expressed in the directors of that state, and that the people along the line will subscribe liberally to carry forward the work.

#### Railroad from Wilmington to Newcastle.

The Wilmington papers state that the Newcastle railroad will be commenced this summer. The Philadelphia, Wilmington and Baltimore railroad company are to guarantee the stockholders six per cent on the capital, reserving to themselves the right to buy out at anything they deem proper. The road will leave P., W. and B. road about a mile from Wilmington, cross the Christina by a new bridge, and enter Newcastle at the depot of the Frenchtown railroad. The estimated cost of the road is between \$80,000 and \$100,000.

The Ashelot railroad company held its annual meeting, for the choice of directors, at Winchester, N. H., on the 10th inst., at which time the following board of directors was chosen for the year ensuing:—John H. Fuller, Keene; John Stratton, Swanzey; A. H. Bennett, Winchester; William Haile, Hinsdale; Cephas Root, Greenfield, Mass.; Philip Ripley, Hartford, Ct.; Azariah Boody, Springfield, Mass.

At a subsequent meeting of the board, John H. Fuller, Esq., was unanimously elected President.

#### Canal Tolls.

The amount received for tolls on all the New York State canals during the third week in May, is.....\$121,471 11  
Same period in 1850..... 117,672 45

Increase over 1850..... 3,798 66

The aggregate amount received for tolls from the commencement of navigation to the 22d of May, inclusive, is.....\$643,930 91  
Same period in 1850..... 480,934 20

Increase over 1850..... 162,996 71

This shows a very handsome increase over the last year, when it is taken into consideration that the tolls this season have been reduced 25 per cent on flour and wheat, and about 33 per cent on railroad iron. Of the latter article the shipments have been immense.

**Indiana.**

**Evansville Railroad.**—The Fort Pitt brought down in a flat on Thursday the first locomotive for the Evansville and Illinois railroad. It is a large and beautiful engine of the most substantial workmanship. It weighs seventeen tons, is called Vanderburg, and was made by Messrs. Norris, Brothers, Philadelphia. It now lies at the foot of the truck road, and will soon be run up the wharf to the depot. There are a good many persons hereabouts who never saw a locomotive, to whom this will be a curiosity. It will, ere the passage of many months, be dragging along trains of cars.—*Evansville Journal.*

**Sale of City Dividend Stock in the Baltimore and Ohio Railroad.**

The proposals for purchasing 1400 shares of the Baltimore and Ohio railroad stock, held by the city of Baltimore, and which was received as dividends on the stock originally subscribed for by the city, were opened to-day. The following is a list of the bids. Messrs. Hack & Sons bid for the whole amount, but, as they were outbid for 360 shares by others, they only receive 1040 of the whole amount offered:

Andrew Hack & Sons.....	1400 shares at	78 11
Wm. Woodville & Son.....	100 "	78 16
" ".....	100 "	78 31
" ".....	100 "	78 58
J. H. Ehlen.....	50 "	78 25
Wm. McConky.....	50 "	78 26
Abram Cloud.....	10 "	78 37
Wm. McConky.....	25 "	78 38
" ".....	25 "	78 51

The following is a list of the unsuccessful bids:

J. I. Donaldson.....	100 "	78 00
Francis Forman.....	30 "	78 00
Wm. Fisher.....	182 "	78 02
Wm. Ehlen.....	50 "	78 03
Wm. Woodville & Son.....	100 "	78 06
John Gill.....	15 "	78 07

—*Baltimore Patriot.*

**For the American Railroad Journal. Ohio.**

**Columbus, Piqua and Indiana Railroad.**—This road, comprising the western portion of the main trunk line, extending from Wheeling, through the heart of Ohio, to the Indiana State line, is fast gathering to itself so many elements of influence and aid, as to render its work a matter of speedy accomplishment. Its prominent position will not only ensure this, but becomes the guarantor of its future success. The interest manifested in its progress is commensurate with the scope of its influence; and no ordinary degree of solicitude and impatience will attend it, until it attains to completion.

In the establishment of that great central chain of railway, commencing at the Ohio, and extending to the Mississippi river, to accommodate that vast commerce alternating between the Atlantic seaboard and the confines of the great west, upon the lines thrown up to it by the cities of Philadelphia and Baltimore, a highway was projected which will at once meet the exigencies of the producing regions of the west, and the demands of the discharging reservoirs of the east.

Its effect upon that stretch of territory through which it passes, in producing and invigorating many and various classes of industrial interests of field and factory, is as incalculable, as the estimate of the extent and means of support attaching to it, which an unparalleled commerce can create.

Trace upon the map of Ohio, the route of the Central Ohio, and Columbus, Piqua and Indiana roads, as it traverses, side by side with the great National road, those central and populous counties containing the chief towns and richest farming lands in the State, intersecting in its course every communication of canal and railroad ranging be-

tween the Ohio river on the south and the lake, and see how many sources of a substantial and perpetual success are made tributary to it. The Columbus and Indiana railroad company placed 22½ miles of their road, lying between the towns of St. Paris and Covington, 24 miles from the Indiana line, under contract, as to its grubbing, grading and masonry, in December last, which work since that time has been under a vigorous prosecution. The surveys on the line between St. Paris and Columbus, a distance of 56 miles, having been completed, the company have advertised this portion for letting. The contracts at the former letting were below the estimated cost of \$4,000 per mile; but the topography of the country embracing this eastern division is such—presenting, for the most part, a surface grade, with but a single high gradient of a short distance, and a remarkable freedom from curvature—as will ensure the construction of this portion at a more reduced cost. It is the intention of the company to contract for the iron, which will be of the most approved heavy rail, by the coming fall; and place a portion of the road in full operation as soon as practicable thereafter. The financial affairs of the company are in a position which will enable them to establish the grade of the entire road of 89 miles, without incurring any debt.

The stock in this road, subscribed for and paid in, by counties and townships along the line, am't to.....\$226,000  
Private subscriptions.....120,000

Aggregate.....\$346,000

We look at this work, under its present efficient management, as certain to reach an early completion, at a less cost for a good road, than any other in the State; and to afford a large remuneration in benefits and revenue to those interested in its prosecution, growing out of a heavy traffic which must necessarily fall to its share. \*

**Progress of Railroads in Virginia.**

It will not be long, says the Richmond Times, before we shall witness a great change in the interior travel of the State. Some time in the next fall the Richmond and Danville Railroad Company expect to have their road in operation as far as the junction with the South Side railroad. The latter work is actively progressing, and, we believe, is expected to be finished to Farmville by the end of the year. We are not informed how soon the company calculate upon completing it to Lynchburg. The Virginia and Tennessee railroad will be opened to Salem, it is thought, next fall. The distances from point to point have been furnished to us as follows:

Richmond to Junction.....	55.2 miles.
Junction to Farmville.....	16.8 "
Farmville to Lynchburg.....	52.8 "
Richmond to Lynchburg.....	124.8 "
Lynchburg to Salem.....	62 "
Richmond to Salem.....	196.8 "

**Massachusetts.**

**Manchester and Lawrence Railroad.**—At a meeting of the directors of this corporation at Manchester, on Wednesday, Mr. Crane tendered his resignation of the office of President, and George H. Dodge, of Hampton Falls, was chosen in his place.

**Ashuelot Railroad Company.**—Board of Directors:—John H. Fuller, Keene; John Stratton, Swanzey; A. H. Bennett, Winchester; William Haile, Hinsdale; Cephas Root, Greenfield, Mass.; Philip Ripley, Hartford, Ct.; Azariah Boody,

Springfield, Mass. John H. Fuller, Esq., was unanimously elected President. Committee to audit and settle the accounts of directors and other agents of the Company:—Levi Chamberlain, of Keene; Henry Kingman, of Winchester; and Zebina Newell, of Keene.

**Providence and Worcester Railroad.**—At the annual meeting of the P. & W. railroad company, on the 19th inst., the following gentlemen were chosen directors:—Orray Taft; Alexander Duncan; John Barstow; Moses B. Ives; William Sprague; William Foster; James Y. Smith; George W. Hallett; Harvey Chase; Gideon L. Spencer; Aaron Rathbun; Paul Whitin; John W. Lincoln; Shubael Hutchins; Moses B. Lockwood.

At a subsequent meeting of the Directors Mr. Taft was chosen President; Mr. Duncan, Vice-President; J. R. Balch, Clerk and Secretary; and Isaac B. Southwick, Superintendent.

**Indian Orchard Railroad.**—We learn from the Springfield Republican that the Indian Orchard branch railroad was passed over by an engine for the first time on the 15th inst. This road connects with the western road about five-and-a-half miles east of Springfield, and about one-and-a-half miles west of the Wilbraham depot, and is one mile and a few rods in length, and has cost about \$12,000.

**Norfolk County Railroad.**—At a meeting of the Norfolk County railroad company, held May 20th, 1851, W. Farnum; J. C. Hurd; Daniel Hill; James Lee, Jr.; J. B. Wheelock; Horatio Bigelow; John Smith and Lyman Kinsley, were chosen Directors. At a meeting of the Directors, held same afternoon, Welcome Farnum was chosen President, and E. W. Clapp, Clerk.

**Virginia.**

**Orange and Alexandria Railroad.**—The track of the Orange and Alexandria railroad is now advancing towards its destination at the rate of a quarter of a mile a day, and has already crossed the Mount Vernon road, two miles and a half from the point of beginning. Its progress from this time will be from six to ten miles a month, reaching the vicinity of Broad Run in the month of August.

**Central Railroad.**—On Wednesday 7th inst., the board of directors of the Virginia Central railroad, let out the following sections of their road west of Charlottesville, which will complete the road to the Tunnel, the whole to be completed by July, 1852, and that portion of the road from here to Woodville will be completed by October next. All the contracts have been taken below the Engineer's estimate.

**Winchester and Potomac Railroad.**—The stockholders of the Winchester and Potomac railroad will have the pleasure of pocketing another dividend, of no less than six per cent. for the first half of the present year. This rate of twelve per cent. per annum shows a nett profit, including the \$5,000 annuity to the State, of near \$20,000. This, though much less than the rate of the dividend would indicate, is a very fair result, and reflects high credit upon the management of the road, under its worthy and indefatigable President—*Winchester Virginian.*

**New Hampshire.**

**Portsmouth and Concord Railroad.**—At the annual meeting of this company, held on the 14th inst., the following gentlemen were elected directors for the coming year:—Alfred W. Haven; Alexander Ladd; Josiah G. Hadley; John N. Handy, of Portsmouth; Arthur Fletcher, of Concord; and Nathaniel Batchelder, of Epping. By



the report, and the statements made, we can state with confidence that the road will be in running order in November next, at the expense of \$850,000.

#### Ohio.

##### *Cincinnati, Wilmington and Zanesville Railroad.*

—The first meeting of the stockholders of this road took place at Circleville on last Thursday, the 15th instant. We give the names of the Directors chosen, and the amount of stock represented, as follows:

**DIRECTORS.**—W. Medill and D. Tallmadge, of Fairfield; W. Griswold, of Pickaway; D. McLean, of Fayette; F. Corwin and L. Fitzhugh, of Clinton; H. D. Lyman, of Muskingum.

##### **AMOUNT OF STOCK SUBSCRIBED, UNCONDITIONAL.**

Pickaway.....	4,443 shares.
Fairfield.....	324 "
Muskingum.....	150 "
Perry.....	12 "
Fayette.....	401 "
Clinton.....	4,713 "

##### **AMOUNT SUBSCRIBED CONDITIONAL.**

Pickaway.....	107 shares
Perry.....	38 "
Clinton.....	304 "

##### **STOCK VOTED, BUT NOT SUBSCRIBED.**

Fairfield.....	5,000 shares.
Fayette.....	2,000 "

Aggregate of stock, 17,482 shares, making the amount in money \$874,100,000.

There will be a meeting of the Directors at Circleville on Tuesday next, the 20th instant, for the purpose of organizing.

#### New York.

**Plank Roads in New York.**—The following table shows the number of Plank Roads, and the cost per mile, in the state of New York:—

	Opened.	Miles.	Cost p.m.
Great Western Albany.....	1849	11	\$2,555
Fonda and Georgia.....	1845	18	1,850
Fultonville and Johnstown.....	1849	5	5,000
Rome and Utica.....	1848	15	1,713
Utica and Burlington.....	1849	5½	2,100
Rome and Oswego.....	1847	60	1,600
do. Western.....	1849	11	1,500
do. Taberg.....	1849	9	1,300
do. Madison.....	1849	22	1,250
Salina and Central.....	1847	16	1,500
Syracuse and Manlius.....	1844	8	1,200
do. Bridgeport.....	1849	12	1,400
do. Oswego.....	1840	32	1,300
do. Liverpool.....	1849	11	1,100
do. Tully.....	1848	25	1,500
Split-Rock Head.....	—	—	1,500
Hannibal and Oswego.....	1848	11	2,000
do. do.....	1848	5	1,800

The Tolls are paid in the increase value of the land, the wear and tear of wagons, harness and horses, and in the cheapening of transportation, which is thus secured at all seasons of the year. But this is not the only thing; a farmer estimates that he saves tolls in the labor of cleaning horses. In fact, Plank Roads are invaluable.—*Albany Journal.*

#### Ohio.

##### *Cincinnati, Hamilton and Dayton Railroad.*

We are informed by the *Hamilton Intelligencer*, that there is an engine on the track of the Cincinnati, Hamilton and Dayton railroad, running from Hamilton south, about four and a half miles, transporting gravel and other materials for the road beyond; that the whole line from Cincinnati to Hamilton will be completed by the middle of August next.

In regard to the Hamilton, Eaton and Richmond road, the *Intelligencer* says:—

As far as Eaton the grading will be finished by August or September, the heaviest portion, near

Eaton, being very far advanced. By the time the grading is finished, the iron, for which a very favorable contract has been made, will be here. The road will be in operation before Christmas to Eaton, and probably much beyond. The whole road, from Hamilton to Richmond, is under the charge of one company—and though we have not full data farther than Eaton, we confidently expect to see the connection made with Richmond before spring.

##### **Lake Shore Railroad.**

It is stated that the difficulty in relation to the gauge of the Lake Shore road, from Buffalo to Erie, has been amicably settled. It will be built of the Ohio gauge, which is different both from the Erie and the Central line. It will be an independent road, and will afford, on fair terms, accommodation to all connecting lines. The difficulty in relation to the link of Shore Road between Erie and Pennsylvania State line has, we understand, been overcome, and the whole line from Buffalo to Cleveland will be completed as speedily as possible.

##### **The Pacific Railroad.**

A letter appeared in a Galveston paper, written by the Hon. V. E. Howard, member of Congress from Texas, accompanied by a communication from Col. Abert, of the United States Topographical Engineers, in which it is stated that a railroad from the Mississippi to the Rio Grande, crossing the head of navigation of all the principal rivers of Texas, and passing thence to the Pacific, could be made for the small cost of eighty-five millions of dollars. This is calculated at the rate of \$40,000 per mile to the Rio Grande, and \$60,000 per mile from that point of the road to the Pacific—the entire distance being about 1,700 miles.

Mr. Howard is of opinion that the project of Mr. Whitney will receive the sanction of Congress at its next session, including a southern branch through Texas. Without such branch as a condition, he says the measure cannot pass. Texas, in his estimation, can control that part of the question by consenting or refusing to give the aid of her own public domain on the terms asked by Mr. Whitney.

##### **Railroad Barbecues.**

In addition to the railroad barbecue at Dunkirk, in honor of the opening of the Erie railroad, other entertainments of the kind are coming off in various parts of the country to celebrate the opening or commencement of railroads. At a meeting recently held at Lexington, Ky., it was resolved to give a free barbecue in honor of the completion of the Louisville and Frankfort railroad, and the commencement of the Maysville and Lexington railroad, which events are expected to occur about the same time. The day is to be hereafter named. The meeting paid a deserved compliment to both the companies, for their untiring devotion to the cause of internal improvements.

The opening of the Montgomery and West Point railroad, Alabama, was recently celebrated by a grand barbecue at the latter place.

#### Indiana.

The city of Lafayette has, by a vote of 548 to 245, agreed to loan its credit for \$100,000 to the Lafayette and Indianapolis railroad. This sum will place in the hands of the company ample means for the speedy construction of the above work. The iron for the road has already been contracted for, and the sum voted above is to be used principally for the purchase of equipment. We are happy in being able to announce the fortunate

result of the action of the city of Lafayette. It is a justly deserved compliment to the able manner in which the directors of the company have pushed forward this important work.

#### Ohio.

**Hillsboro' Railroad.**—The following are the new board of directors of this road, viz: W. H. Trimble, D. J. Fallis, Benj. Barrere, J. Browning, Dr. Speace, John Sloane, and W. H. Baldwin.

Wm. H. Trimble, Esq., has been chosen President of the board.

The stockholders of this road have been divided in opinion in reference to forming a connection with the Cincinnati and Belpre railroad, for the purpose of making the former the trunk line of the latter to Cincinnati. The former efficient president of the Hillsboro road, W. O. Collins, Esq., to whom that company is much indebted for the progress it has made, was in favor of consolidating the two companies, which would seem to a person at a distance to have been most for the interest of all parties. The stockholders thought differently, however, and have elected a new board for the purpose, as we understand, of constructing an independent line between the Ohio river and Cincinnati. The above result, says the *Sciota Gazette*, will be to force the Belpre company to push its line through their road to Cincinnati, by the way of Blanchester and Milford. In reference to this subject, the following figures, from the plats of the chief engineer of the Belpre company will show the difference in the length of the routes to that city respectively:

Chillicothe to Greenfield.....	22-67 miles.
Greenfield to Blanchester.....	32-50 "
Blanchester to Milford.....	20-00 "
Milford to Cincinnati.....	14-00 "

Chillicothe to Cincinnati, via Greenfield.....	89-17 miles.
Chillicothe to Hillsboro.....	40-75 miles.
Hillsboro to Blanchester.....	21-10 "
Blanchester to L. M. railroad.....	16-00 "
Thence to Cincinnati.....	23-00 "

Chillicothe to Cincinnati, via Hillsboro.....	100-85 miles.
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##### **New York and New Haven Railroad.**

The old board of directors of the New York and New Haven railroad have been re-elected, viz:—Robert Schuyler, Jonathan Sturges, Morris Kelchum, A. G. Phelps, E. Townshend, of New York; H. G. Sanford, Stamford; W. P. Burrell, Bridgeport; Wm. W. Boardman, New Haven; John E. Thayer Boston.

#### Indiana.

**Northern Railroad.**—This road, which is the extension of the Michigan Southern railroad, is now all under contract. It is 115 miles long, and is estimated to cost about \$10,000 per mile. The subscriptions to the capital stock now amount to \$800,000.

##### **Hempfield Railroad.**

The county of Ohio, Virginia, has voted to subscribe \$150,000 to the Hempfield railroad.

Chas. Ellet, Jr., has been appointed Chief Engineer of the Hempfield railroad, and he is expected on the line of the road in a few weeks.

#### Ohio.

##### *Cincinnati and Belpre Railroad Subscriptions.*

The towns of Marietta and Harmar have voted the sum of \$150,000 to aid the above work; the former 100,000, and the latter 50,000 dollars.

## LOWMOOR

### AND U. S. BEST FINCH IRON. To Iron Merchants.

JOHN FINCH & SONS, Iron Merchants, Liverpool, now are, and for more than twenty years past have been, sole Agents for the LOWMOOR IRON COMPANY, for the United States and Canada, for the sale of their well known Railway Tire Bars, and Axles, Piston Rods, Boiler Plates, Angle, Rivet, and all other kinds of Lowmoor Iron: also, sole Agents for the sale of the superior Staffordshire Iron stamped "FINCH CROWN" and "U. S. BEST FINCH;" and Merchants and Wholesale Dealers in all other kinds of British Iron.

We hereby inform our friends and the public that we have this day appointed Mr. WM. BAILEY LANG, of Boston, as our only representative to receive orders and to transact our general business in the United States.

For JOHN FINCH & SONS,  
JOHN FINCH Sen.

Boston, April 11, 1851.

LOWMOOR and other Bent, Welded and Blocked RAILWAY TIRES, ready for use, E. FINCH'S Patent Dovetailed and other kinds of WROUGHT IRON RAILWAY WHEELS, with, or without the finished Axles, for Locomotives and for Passenger and Merchandise Cars, also Wrought Iron Railway Chairs, Railway Spikes, etc.

To the Managers of Railways, Engineers and others: Gentlemen:—We, FINCH & WILEY, Engineers, Liverpool, Manufacturers of the above articles, respectfully inform you that we have this day appointed Mr. WM. BAILEY LANG, of Boston, as our sole Agent for the sale of said articles, and the transaction of our business in the United States of America, and for whom we solicit your kind attention and patronage.

For FINCH & WILEY,  
JOHN FINCH, Sen.

Boston, April 11, 1851.

Having accepted the above Agencies, I beg leave to solicit your orders, which shall at all times receive my prompt and careful attention. Please address all communications either to MESSRS. JOHN FINCH & SONS or MESSRS. FINCH & WILEY, Liverpool; or to me, at my Steel Warehouse, No. 9 Liberty Square, Boston. Yours very respectfully,

WM. BAILEY LANG.

Boston, April 11, 1851.

The following are testimonials of the quality of FINCH & WILEY'S WROUGHT IRON RAILWAY WHEELS from the Yorkshire and Lancashire Railway Co., one of the largest in Great Britain, and from the London and North Western Railway Co., the largest Railway Company in the world.

LONDON AND NORTH WESTERN RAILWAY,  
(Northern Division.)

WAGON DEPARTMENT, ORDEALL LANE,  
Manchester, January 4, 1851.

Gentlemen:—I have very great pleasure in bearing my testimony to the excellent quality of your Wrought Iron Railway Wheels.

This Company have many of them now in use on their lines, and during my experience, as their Superintendent, which is now upwards of 9 years standing, I have not known any of them to fail during that time.

I am, Gentlemen, yours, truly,  
OWEN OWENS.

Messrs. FINCH & WILEY,  
Windsor Foundry.

LANCASHIRE AND YORKSHIRE RAILWAY,  
Wagon Department, Jan. 3, 1851.

Messrs. Finch & Wiley,  
Gentlemen: In reply to your request writing me to give my opinion of the 700 sets of Wrought Iron Wheels you furnished this company during the years 1847 and 1848, I have much pleasure in stating that we have not had a single instance of your Wheels failing in any respect, and I consider them equal if not superior to any Wheels we have on this line of railway. The Tires being LOWMOOR iron, 1½ inch thick, I have no doubt they will run under ordinary goods' wagons 12 years without any repairs more than the tires turning up. I am Gentlemen,  
Yours, truly, WM. EMMETT.

NOTE.—4 Wheels and 2 Axles are one set, consequently this order contained 2800 WHEELS and 1400 AXLES; value over \$100,000.

### Notice to Contractors.

Columbus, Piqua and Indiana Railroad.

SEALED PROPOSALS will be received at the Engineer's Office of the Columbus, Piqua and Indiana Railroad Company, at Urbana, on the 8th day of July, 1851, for the Grubbing, Grading and Masonry of that portion of the line extending from St. Paris, in Champaign county, to Columbus, a distance of fifty-six miles. Plans and specifications of the work may be seen from the 1st to the 8th of July, at the office. The Directors reserve the right to retain bids for twenty days after the 8th, before declaring the work.

The names in full of all the parties should be given in the proposals.

A. G. CONOVER, Engineer.

Piqua, May 20, 1851.

3122

### To Contractors.

OFFICE PACIFIC RAILROAD CO.,  
St. Louis, Mo., May 16, 1851.

THE Graduation, Masonry, and the Laying of the Superstructure of the first Division of the Pacific Railroad, comprising about 45 miles from the city of St. Louis, westward, will be ready for contract on the 20th of June next.

Proposals will be received at the Engineer's Office, St. Louis, from the 20th to the 30th of June, where plans and specifications will be shown. The line will be ready for inspection on and after the 20th of June.

The line will be divided into sections of about one mile each, but offerers can include as many of them in one bid as may suit their convenience.

The company will not bind itself to accept the lowest offer, unless in all other respects satisfactory, but reserves the power to dispose of the work in such manner as may appear most advantageous to the interests of the company.

The Division will embrace about one million three hundred thousand (1,300,000) cubic yards of graduation, and about thirty three thousand (33,000) cubic yards of masonry.

THOMAS ALLEN, President.

JAMES P. KIRKWOOD, Chief Engineer.

### Notice to Contractors.

Ohio and Pennsylvania Railroad.

PROPOSALS will be received for the Grading and Bridging of the Western portion of the Ohio and Pennsylvania Railroad, extending from Wooster, by Loudonville and Mansfield, to the Cleveland, Columbus, and Cincinnati Railroad, at Crestline near Galion, a distance of fifty-three miles.

They will be received at Wooster until the evening of Tuesday the 10th of June, and at Mansfield until the evening of Wednesday the 11th of June next, and will be addressed to the undersigned President of the Company. Plans and profiles of the work east of Loudonville will be exhibited at Wooster, and of the work west of Loudonville at Mansfield, for one week before the letting.

Further information and forms of proposals may be obtained on application to Solomon W. Roberts, Chief Engineer, or Jesse R. Straughan, Resident Engineer of the Western Division. A preference will be given to bidders who will agree to take a per centage of their pay in the stock of the Company.

WM. ROBINSON, Jr., President.

Pittsburgh, May 27th, 1851.

### Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,  
29 Central Wharf.

Boston, June 1, 1851.

### North Carolina.

The meeting of the Directors of the North Carolina railroad, took place in Raleigh on the 12th inst. We learn that the location of the road was determined, its route will be as follows:—From a point near Goldsborough through Waynesborough, passing three or four miles north of Smithfield to Raleigh, which it skirts on the south side, thence

by Hillsborough, Graham, Greensborough, Lexington, Salisbury and Concord to Charlotte, a distance of about 223 miles. Contracts for the entire route will be let under the direction of the President and Chief Engineer, during the month of June.

### AMERICAN RAILROAD JOURNAL.

Saturday, May 31, 1851.

### Stock and Money Market.

The stock and money market present the same general aspect which we have noted for some weeks past. Money continues to be very abundant, with an increasing confidence of its continuing so through the season. We do not anticipate any reverse unfavorable to the progress of our public works, for the present year at least. Bonds of new works, though not in active demand, are disposed of in sufficient quantities to enable companies to make rapid progress.

The foreign iron market continues dull, and rails can be readily purchased at last quotations.

Though the shipment of gold continues large, this movement creates but little anxiety, as the receipts are constantly in excess of exportations. Gold, from its abundance, is now looked upon as a legitimate article of export, just as much so as our surplus crop of breadstuffs. The fact that our own coin is now taking by the Bank of England, has an additional tendency to induce shipments.

We annex an extract from the New York letter of the Union in relation to the gold movement:—

The sound financial principle on which the present charter of the Bank of England was based in 1844, viz.:—That there should be no restraint upon the movement of the precious metals, but that they should come and go precisely as the operation of commerce impel them, has been admirably illustrated in the working of our independent Treasury system. According to the English Bank charter, the institution must give gold for notes, or notes for gold, according to the demands of the public. Thus standard gold bullion is by law taken by the Bank of England in exchange for its notes, at 77s. 9d. per ounce. The English coin is, however, worth 77s. 10½d. per ounce. The difference (1½d.) is the cost of delay, which averages one month at the English mint. Forty pounds troy of standard gold is at the mint coined into 1869 sovereigns. One ounce of coin is therefore worth 77s. 10½d., and the lower price of bullion is allowed the Bank to compensate for delay. Whatever quantity of gold is imported into England, the Bank, on demand of its owners, must issue notes at the above rate. But all gold imported is not standard, and to become so it must be assayed at private assay houses, at the expense of the owner. The expense of assaying varies very much with different descriptions of gold. California bullion is very expensive, and therefore is not sent to London; but the Bank of England has passed resolutions to receive the new eagles and double eagles freshly issued from the United States Assay Office, at 7s. 3d. per ounce, or 1s. 6d. less than standard bullion per ounce, or a difference of two per cent against the American coin, which is rather more than the difference between the two standards. That is to say, 10,000 eagles will average weight as follows:—

Oz.	dwt.	£	s.	d.
5,371	16,	at 76s. 3d.	20,479	19 7
5,272	12,	standard at 77s. 9d.	20,500	3 4

Difference	20	3	7
Cost of assay	19	14	6

The average United States coin is 1½ grains worse than the British, and the reception of the American coin by the bank at a rate equal to the cost of assay, facilitates the migration of the bullion thither. This results from the fact that the Philadelphia Mint turns out only the large pieces, for which there is no circulating demand here, and which are a favorable remittance. This matter ought to be



remedied, so that all the coin emitted by the mint should be that which is demanded by the wants of circulation. The ingress and egress of the metals might then be left with entire safety to the operations of commerce, where there are no government restrictions. There can result no evil from the movements of any trade. It is but a few years ago, that, under the operations of the corn laws of England, the prospect of the necessity of an import of corn convulsed the whole financial fabric of the British Empire. An importation of 2,000,000 bushels of wheat in 1836, precipitated the most severe revulsion of the present century. The importation of 40,866,368 bushels in 1850 was entirely unnoticed, and had no influence whatever upon financial movements. The trade in corn had become regulated, and, as such, had produced its own channels and accommodated itself to all others. It is the same with the specie movement here.

## SALES OF STOCK IN NEW YORK.

	May 29. Sales.	May 22. Sales.
U. S '67 Loan.....	117½	117½
Erie R.R.....	88	89½
Harlem R.R.....	76½	74
Stonington.....	43½	42½
L.I. R.R.....	22½	21½
Norwich & Wor....	64½	64½
Del. & Hudson.....	121½	121½
Reading.....	59	56½
Morris Canal.....	16½	16½
Erie income.....	97	97½
" Bonds.....	103	103
Canton.....	79	75
Farmers Loan.....	60	69½

## SALES OF STOCKS IN BOSTON.

	May 28.	May 21.
Old Colony Railroad.....	67	68½
Boston and Maine R.R.....	106	105½
Eastern Railroad.....	102	102½
Fitchburg Railroad.....	113	113
Michigan Central Railroad.....	103	104
Northern Railroad.....	70½	71½
Vermont Central Railroad.....	37	36½
Vermont and Mass. R.R.....	29½	30½
Western Railroad.....	106	103½
Ogdensburg Railroad.....	39½	40½
Rutland Railroad.....	57½	57½
Boston and Worcester Railroad.....	106	106½
Rutland Railroad Bonds.....	97	97
Ogdensburg Railroad Bonds.....	97½	97½
Vermont Central R.R. Bonds.....	91½	91½
Boston and Providence R.R.....	91	90
Philadelphia, Wilm'gton & Balt.....	29½	29½
Concord R.R.....	53½	54

## New Spring for Railroads and Carriages.

We have recently had an opportunity of examining a new kind of a spring designed for railroad cars, and for all cases where springs are used, which is formed of a combination of wood and steel. The manner of making the spring is simply this. A steel plate is riveted on to a piece of wood, say white oak. The part to which the steel plate is attached is straight, while the opposite side is slightly curving; the ends being, we will say, three-fourths of an inch, and the centre two inches. The rivets are placed within about two inches of each other. To give the *set* to the spring, notches are sawed in the wood nearly to the steel plate.— Into these are inserted small flat pieces of iron, which gives the spring the proper curve. The ends of the steel plate are turned over, and riveted through, so as to prevent the ends of the spring extending themselves. The spring is a semi-eclipse, and when loaded tends to a straight line, instead of curving. Its elasticity is obtained from the elasticity of the wood and metal combined.

The model which we examined is 3 feet long and 2 inches wide, 2½ inches thick in the centre, and ½ at the end, with a regular curvature in the upper side. It has been subjected to the severest test for some months past, having been under a

pressure of 3500 lbs. for most of the time. It appears to retain its elasticity perfectly, and possesses great power of resistance, while it is remarkably sensitive under the slightest pressure. The pieces of iron inserted to give the *set* being of uniform thickness, only the lower parts of them are brought into contact with the wood when the spring is free. As soon as the load tends to bring it into a straight line, a greater extent of surface of the metal slips, or pieces, is brought into contact with the wood, and thus the resistance is increased just in proportion to the load imposed.

We have thus given a brief account of this invention, and the manner of its operation. As we said before, it appears to make a very strong and at the same time a very elastic spring. In this, as in all other matters, the only proper test is experience in their use. This test is we learn soon to be made on railroad cars and carriages, for the purpose of presenting to the public *satisfactory* evidence of its value.

This spring was invented by Mr. Levi Bissell, of this city, and is patented under the name of the Excelsior Spring. We learn that extensive arrangements have been made to manufacture the article for the trade, on a large scale.

## Railroad Meetings.

Our readers will find in our paper of to-day, Advertisements of two important meetings on Western railroads, which are well worth the attention of contractors. The Pacific railroad is a work of immense magnitude, and as the company possess ample means, contractors cannot do better than to turn their attention to that quarter.

## Memphis and Charleston Railroad.

The second annual election of directors for the Memphis and Charleston railroad took place on Monday, the 5th inst., at Huntsville, Holly Springs and Memphis. The following gentlemen were chosen directors:

J. C. Jones,	R. C. Brinkley,
J. J. Donegan,	G. C. Byrne,
J. C. Goodloe,	R. M. Patton,
S. P. Walker,	C. L. Thomas,
Samuel Elliot,	Robt. Fearn.

## Delaware and Raritan Canal.

The Delaware and Raritan Canal company, board, at their recent annual meeting at Princeton, elected Robert F. Stockton, President; John R. Thompson, Secretary; and Richard Stockton, Treasurer. This Canal is the channel through which our Pennsylvania coal tonnage seeks the English markets.

## Quebec and Halifax Railroad.

The railroad movements in the British Provinces possess at all times a good degree of interest to the people of the States, not only from the magnitude of their proposed works, and the relations they sustain to our own roads, but from the indications which they are instrumental of furnishing, of the policy and views of the Home Government, in reference to its American possessions. We have already discussed the provincial projects pretty fully in former numbers, but as the present is a very interesting crisis with them, we take the liberty of referring to them, once more.

The great question now before the Provinces is that of the acceptance of the offer of the British Government, to guarantee the debentures of the three Provinces of Canada, New Brunswick and Nova Scotia, to be issued to build a road from Halifax to Quebec by way of the Gulf of St. Law-

rence, a distance of about 650 miles. As we stated in a former number, this offer on the part of the British Government, is in answer to the solicitations of Mr. Howe, the agent of Nova Scotia, who was sent to England to solicit aid for that portion of the European and North American railroad lying within her territory. The object of that road was to connect Halifax with the railroads of the United States by a road via St. John, the principal city of N. Brunswick. The result of Mr. Howe's mission was a complete failure, as far as its primary object was concerned. It remains now to be seen whether the substitute offered will be accepted; will the three Provinces agree to build the Halifax and Quebec railroad, if the Home Government will give them a credit for this purpose?

We shall give no reasonable cause of offence by saying that the British North American Provinces have not distinguished themselves by any remarkable enterprise, or success in the prosecution of works of internal improvement. A conviction of the importance of railroads as the instruments and agents in the production of wealth, has not taken that strong hold upon their people, as upon those of the States. When the construction of these works was first agitated, their projectors, instead of being governed in the selection of routes, and mode of construction, by considerations of pecuniary profit alone, which is the only safe guide in all similar enterprises, acted upon the traditional maxims imported across the water. Railroads with them must be a *national* affair, having reference to the promotion of a more firm bond of union between the different Provinces. Such were the views of the early projectors of the Halifax and Quebec railroad. This mode of reasoning gave it its circuitous route by way of the Gulf of St. Lawrence, to keep its line wholly within British territory, and far removed from that of the United States, so as to serve as a line of communication in time of war. It was these absurd notions which defeated the scheme when first started. As the line occupied neither the route of convenience for commerce or travel, of course it could not command money to carry out schemes, which did not lie within the scope or object of the business man. Capital always seeks a profitable investment. We were very glad when the scheme was abandoned, and we hailed as a good omen the manner in which the European and North American railroad was seized hold of, as an indication that rational views on the subject of internal improvement, growing out of a conviction of their own wants, was fast making progress among our eastern and northern neighbors.

But these flattering indications have been suddenly dissipated. Mr. Howe returned from Europe with a promise on the part of the British Government, to provide means, on the credit of the Provinces, for building the Halifax and Quebec railroad, and the Province of Nova Scotia has expressed herself warmly in favor of this line. The Province of New Brunswick, which would be but little benefitted by the Quebec line, has declared herself against it. In Canada, public opinion seems as yet to be in abeyance. We are inclined to believe, however, that all three of the Provinces will finally concur in the measure, and that the road will be commenced. The very magnitude of the project, and the vast amount of money to be expended, will secure the sanction of the proper authorities. There will be a sufficient number in each of the governments, whom the prospect of

having the disbursement of the money will seduce from their allegiance to duty and common sense.—As we said before, the magnitude of the measure, and the vast sums of money to be expended, will be causes sufficiently powerful to secure the assent of the Provincial governments to the scheme.

In all that has been urged in favor of the St. Lawrence line, we are struck with the total want of anything like satisfactory evidence to justify its construction. Its friends assume the point that remains to be proved—that the road will pay if built; that the only condition wanting to success, is the money with which to build it. Now when we come to the expediency of constructing this road, we take it that we should be governed by the same considerations that should be our guide in all similar cases. Does the scheme offer a profitable investment for capital? Will it pay? This, in railroads, is the only safe guide. Any other would lead to certain ruin. Railroads cost enormous sums, both to build and operate them; and if we consult our fancies merely, both ourselves and our schemes would soon go to destruction. Just in proportion as political or private considerations interfere, and substitute their claims for the wants of trade and commerce, then are we certainly going astray. In building ships, we adapt them to the convenience and wants of the trade. Political considerations do not give the model of the hull, does not determine their tonnage, nor the direction of their voyages. Why not? Because all these matters do not come within the scope of political speculations. Just in proportion as we adapt our agents to the objects which we wish to accomplish, we succeed: and the extent of our failure is measured by the want of such adaptation. When we are wrong, the abundance of money is our greatest misfortune.—It may involve us inextricably. It is like a strong breeze upon a ship sailing on a wrong tack. The history of railroads in the United States is pregnant with illustrations of the truth of what we have said. When the railroad movement commenced in this country, the grandest schemes were projected in the Western States. Each State laid out its system on paper, and immediately commenced the construction of the various lines of which it was composed. The present debts of these States show that they did not lack abundance of means. Yet they all fell to the ground, after millions had been expended. Take Illinois for example. That State wasted some \$15,000,000 upon her internal improvement projects. Every railroad she commenced was abandoned, and dense forests now cover hundreds of miles of graded lines. What was the cause of this failure? for we now find Illinois to be one of our most active and successful States in the construction of railroads. It was simply this. In the one case, her schemes were projected by politicians, who had no other guide before them but a map of the State and their own selfish views. The lines of the projected roads were entirely arbitrary, without reference to the routes of trade or travel. Another cause was the ease with which the money for these works was obtained, and the feeling on the part of those disbursing it, that they were spending some other person's money, not their own. They of course were comparatively indifferent whether it was saved or wasted. Loss would not impoverish them. They had therefore every inducement to enrich themselves by plundering the State—especially when they saw that the whole must be wasted, if expended upon lines under the existing polity. The system first adopted, antici-

pated the wants of her people, and of course was not adopted to meet them. Some fifteen years have since elapsed, and the people of Illinois are now finding out what they do need, and the lines now projected merely express the nature and direction of this want. The people now choose to build their own roads, for the reason, that they promise to be very profitable, and more than all, because they are determined to see them take a proper direction, and to have them economically built and well managed. We shall hear of no more disasters in that State, so long as her people follow the rules of common sense which lie at the foundation of success in all kinds of business.

How is it with the Provinces? They now propose to build a line that never will be needed, nor used for business travel, for the reason only that they can easily get the money for it. If the proposed line should be economically built the money expended would be wasted, because the road would never pay. But money never is, nor never will be well expended, which does not belong to the person making, or superintending the expenditure. But waiving the discussion of this question, let us see what will be the sources of income of the above line. For freight, its way business must be very slight, because for its whole distance it will run parallel to, and in the immediate vicinity of tide water, with which railroads never can compete in the carriage of freight. Its way travel must be slight, for the reason that in the lower Provinces there is no town at which centre the trade and business of the whole community; these are divided among a great many places, and such, from the character of the country, must always be the case. For the purpose of forwarding freight to market, the Provinces do not need a railroad; for this they already possess facilities superior to any other portion of the continent. Almost every farm in New Brunswick and Nova Scotia is washed by tide water, its great markets are, and always must be, the cities of the United States, to which at all times they enjoy the easiest access.

How is it with through travel and freight? Produce of the Canadas, designed for exportation, is nearly all raised above Montreal, that town by the above line, is over eight hundred miles from Halifax. It would cost, therefore, by the lowest safe computation, \$16 per ton, to send freight from the former to the latter city, more than double the cost of freight between the same points by way of New York. The same rule would apply, though to a less extent, to travel. The truth is, that no intelligent man could for an instant be made to believe that the Halifax and Quebec railroad would carry a pound of freight between the St. Lawrence and the Atlantic, or a single passenger, on the ground that the road offered the cheapest and most economical route. It requires no argument to prove this. All that is necessary to look at is the length of line, and cost of transportation by railroad. It must be borne in mind too, that a great part of the line of the above road will pass through a most sterile country, and nearly one half of it through a dense, and an almost entirely uninhabitable wilderness.

We have thus stated in brief some objections to building the above road, we have neither time nor room to enlarge upon them, nor is it necessary we should, we hope they will be carefully considered by our eastern friends, and that their good sense will not be completely overturned by the prospect of getting money for a worthless project.

#### Ohio.

##### Cincinnati, Wilmington and Zanesville Railroad.

—The board of directors of the Cincinnati, Wilmington and Zanesville railroad company, held the first meeting at Circleville on the 22nd instant. The board was organized by the election of Franklin Corwin, of Clinton county, as President; Mr. Rodabaugh, of Lancaster, Treasurer; and Mr. Triplitt, of Circleville, Secretary. The road is to be surveyed immediately.

##### Alabama and Tennessee Railroad.

In speaking of the progress of this road the Selma Reporter says: At the recent letting of this railroad through the counties of Talladega, Benton and Cherokee, the best spirit prevailed among the stockholders, and the greater part of the grading of the northern division, comprised between the Coosa river, at the dividing line between the counties of Talladega and Shelby, and the town of Gadsden, was proposed for by responsible stockholders. All the heavy work was taken, and but few sections of a light character now remain to be proposed for. The work is to be commenced in the month of August and September, and is to be completed in two years. The contracts were principally taken by companies of stockholders, who design employing their own laboring forces, and who propose to receive one half and one third of the amounts of their contracts in stock of the company.

The contractors are progressing rapidly with their work on the southern division. The grading of upwards of twenty miles of this division is completed, and a large force is engaged on the remainder of the 56 miles between Selma and Montevallo—a portion of the iron rails purchased for this part of the road has been shipped, and arrangements have been made to lay the rails immediately on their arrival.

The only remaining part of the Alabama and Tennessee railroad not under way at this time, within the exception of a few sections on the northern division, as before stated, is that portion of the railroad between Montevallo and the Coosa river, comprising a distance of about 31 miles. The work on this section is generally light, and may be soon accomplished. We understand that it is the intention of the directory, to place it under contract the ensuing fall.

From this statement of the present condition of our great enterprise, it will be perceived that the prospects of its completion in three years, or at the farthest four years, are very flattering. For this agreeable state of affairs, all parties engaged in the work, and particularly the stockholders, who have stepped forward and sustained the energetic action of the directory with promptitude and fidelity, deserve great praise.

#### Railroad Iron.

2000 TONS T RAILS, of desirable pattern, arrived, and to arrive, for sale by  
RAYMOND & FULLERTON,  
61st  
45 Cliff st.

##### Mohawk Valley Railroad.

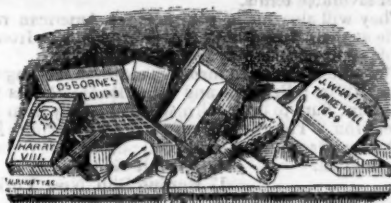
THE BOOKS OF SUBSCRIPTION TO THE Capital Stock of this Railroad will be opened at the Chemical Bank, and at the office of Arthur N. Gifford, No. 60 Merchants' Exchange, on the 13th instant. The Report of the Survey and Estimates may be obtained, and a Map and Profiles of the route seen, at the latter place.  
May 17th, 1851.

A. C. FLAGG,  
JAMES J. ROSEVELT,  
A. MANN, JR.,

Committee,



**Huffy's**  
Engineers, Architects and Draftsmen's  
**STATIONERY EMPORIUM.**



**WHATMAN'S** Turkey Mill Drawing paper, Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's, Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles, Sabel Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and Sand, Water Colors, Pallets, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books. All goods packed with care, and forwarded to any part of the United States.

**JOSEPH HUFFY,**  
Successor to H. L. Lipman,  
139 Chestnut st., Philadelphia.

May 15, 1851.

1851. 1851.  
**PEOPLE'S OSWEGO LINE,**  
New York and Oswego,

**ARE** prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.  
**LEWIS & BEARDSLEY,** Oswego.  
**JAMES W. CAMPBELL,** New York.

AGENTS.  
James W. Campbell, 111 Broad st., New York.  
W. H. Clark, 60 Quay st., Albany.  
Lewis & Beardsley, Oswego.  
Smith & Hunt, Toledo, Ohio.  
G. W. Bissell, Detroit, Mich.  
C. Walker & Son, Chicago, Ill.  
H. H. Hurlbut, Western States.  
May 15, 1851.

**Notice to Contractors.**

*Pennsylvania Railroad.*

**PROPOSALS** will be received from the 9th to the 24th of June next, at Johnstown and Summit, for the Grading and Masonry of that part of the Mountain Division of the Pennsylvania Railroad between Altona, in Blair county, and Pringle's Point, a few miles below Jefferson, in Cambria—a distance of 25 miles.

The road within this distance will cross the Allegheny mountains, encountering some of the heaviest grading offered in this country. In addition to a number of extensive cuttings, embankments and culverts, there will be one tunnel 1200 yards in length at the summit of the mountain, and another of 200 yards through Pringle's Point.

Terms cash, monthly. For further information apply to **EDWARD MILLER, Esq.** Associate Engineer, Blairsville, Indiana Co., or to **STRICKLAND KNEASS, P. A. Engineer** at Altona, Blair county.

**J. EDGAR THOMSON,**  
Chief Engineer.

Engineer Department P. R. R. Co.,  
Philadelphia, May 1st, 1851.

**SUPERIOR BLACK WRITING & COPYING INK.**

**Jones' Empire Ink.**

87 Nassau st., Sun Building, New York city.

Net prices to the trade—

Quarts, per dozen,	\$1 50	6 oz. per dozen,	\$0 50
Pints, " "	1 00	4 " "	0 37 1/2
8 ounces, " "	0 62 1/2	2 " "	0 25

On draught per Gallon, 20 cents.

This is the best Ink manufactured. It flows freely, is a good copying ink, and will not mould, corrode, precipitate or decay. Orders for export, or home consumption, carefully and promptly attended to by

**THEODORE LENT.**

**NOTICE.**

**THE** Subscribers hereby give notice that they sold out their interest in the New York Iron Bridge Company on the 29th of April last to **M. M. WHITE**, and that their interest in the Company ceased on that date.

**W. RIDER & BROTHERS,**  
**ELIHU TOWNSEND.**

The business of the New York Iron Bridge Co. will be continued as formerly by the Subscriber, who respectfully solicits orders for bridges as heretofore.

**M. M. WHITE, Agent**  
New York Iron Bridge Company,  
39 Wall st., Jauncey Court.

New York, May 13th, 1851.

**Spikes, Spikes, Spikes.**

**ANY** person wishing a simple and effective Spike Machine, or a number of them, may wish it, will be furnished with a set for trial, not to be paid for until they are satisfied of their superior quality over any other. Also made at short notice, and in the best manner, Locomotive Cranks, Engine and Car Axles, and other Locomotive Forgings.

All work ordered from me will be made of Salisbury Iron, and done in the best manner.

Address **HORATIO AMES,**  
Falls Village, Conn.

May 1, 1851.

**Lovegrove's Patent Cast Iron Water and Gas Pipes.**

**THE** Subscriber, the Inventor and Patentee of the Centrifugal mode of giving form to metallic substances while in a molten state, is preparing to make Cast Iron Water and Gas Pipes, of any dimensions, at prices much lower than they can be made in the old manner, and the pipes warranted to stand a pressure of three hundred pounds to the square inch, and to be soft enough to drill. Steam Engines and all kinds of machinery. Cast Iron Doors and Frames, and Mill Castings of every description, made to order.

**THOMAS J. LOVEGROVE,**  
Machinist and Founder,  
West Falls Avenue, below Pratt st., Baltimore.

**To Railroad Companies, etc.**



The undersigned has at last succeeded in constructing and securing by letters patent, a Spring Pad-lock which is secure, and cannot be knocked open with a stick, like other spring locks, and therefore particularly useful for locking Cars, and Switches, etc.

I also invite attention to an improved **PATENT SPRING LOCK**, for **SLIDING Doors** to Freight and Baggage Cars, now in use upon the Pennsylvania Central, Greenville and Columbia, S.C., Reading, Pa., and other Railroads.

Companies that are in want of a good Pad-lock, can have open samples sent them that they may examine and judge for themselves, by sending their address to **C. LIEBRICH,**  
46 South 8th St. Philadelphia.

May 9, 1851.

**To Engineers and Ship Builders.**

**THE** Advertiser is desirous of a situation in a respectable concern, he has acquired a practical knowledge of his business in the establishment of **R. Napier, Esq., Glasgow**, has since for several years had the management of the Works of an extensive Steam Packet Co., for whom he designed and built some Iron Screw Ships, whose capabilities and performances give the highest satisfaction. While acquainted with all the most approved modes of construction of marine engines, he is prepared to submit original designs. In modelling and draughting he has had much and successful experience. Can produce the highest testimonials as to character and abilities from the first engineer on the Clyde.

Address **ENGINEER,** box 2315 lower Postoffice.

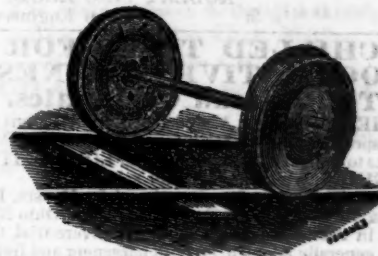
**Boston Locomotive Works,**

—Late Hinkley & Drury—

No. 380 Harrison Avenue,  
**BOSTON.**

Locomotive and Stationary Steam Engines; Boilers; Iron, Brass, Copper and Composition Castings; Coppersmith's Work, and all kinds of Railroad Machinery furnished at short notice.

ALSO



**Van Kuran's Improved Railroad Wheel,**

Patented May 1, 1849. Manufactured under the personal superintendence of the Patentee, as above.

Orders for any quantity of wheels executed with dispatch, and wheels and axles fitted in the very best manner and at the lowest rates. Address

**DANIEL F. CHILD, Treasurer, Boston.**



**Providence Tool Co.,**

MANUFACTURERS OF

Plane Irons, Tooth Irons, Soft Moulding and Rabbet Irons, Cornice Irons, Plow Bits, and Planing Machine Knives:

**NUTS, WASHERS AND BOLTS.**

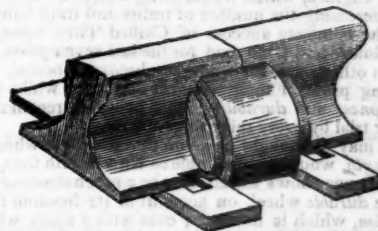
—ALSO—

**PLATE HINGES AND PICK AXES.**

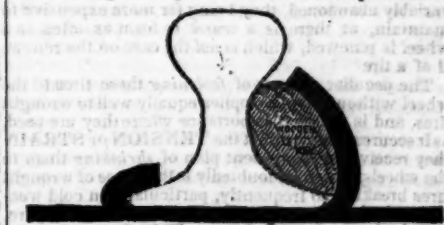
They are prepared to execute orders for all descriptions of Cold Punching and Job Work.

**WM. FIELD, Agent.** **RUFUS WATERMAN, Treas.**  
**PROVIDENCE, R. I.**

**Railroad Iron, SPIKES, AND WROUGHT IRON CHAIRS.**



**THE** Undersigned, Agent for Manufacturers, is authorized to contract for Welsh Railroad Iron of the best quality, and deliverable at any port on favorable terms, also **Spikes and Wrought Iron Chairs**, made from the best iron, and of any pattern and weight. The new Wrought Iron Chair, with the introduction of a "Key," as per the annexed plan, will be found a great improvement on the old pattern.



**Boiler Plates** of superior quality, perfect regularity in the squaring and thickness, and made with great care.

Samples can be seen at our office, No. 20 Beaver st.  
**CHARLES ILLIUS.**

**To Contractors.**

Engineer's Office Central Ohio R. R.  
Zanesville, May 7, 1851.

**SEALED** Proposals will be received at this office until the 1st of June next, for laying the Track upon the whole line, including sidings—about 63 miles—west of Zanesville.

Plans and Specifications will be exhibited after the 20th day of May.

By order of the Board.

ROBERT MAC LEOD,  
3t Chief Engineer.

### CHILLED TIRES FOR LOCOMOTIVE ENGINES. To Railroad Companies.

**THE** Undersigned, Assignee of Letters Patent, respectfully invites the attention of Railroad Companies to the **CHILLED TIRES FOR LOCOMOTIVE ENGINES**, which he offers for sale.

These Tires were first introduced by Messrs. Perkins & McMahon, upon the Baltimore and Ohio Railroad, in 1843, where, after a long and severe trial, they were generally adopted, on both passenger and freight engines, and now have entirely superseded Wrought Tires on that road, on which are many engines of the heaviest class, which ascend grades of *eighty-five feet per mile*, taking with them *one hundred and twelve tons*, exclusive of cars. This performance shows in some measure the adhesive character and strength of the Tire.

During a service of seven years, these Tires have very much exceeded in durability those of wrought iron, while their first cost, and expense of repairs, is more than *fifty per cent. less*. They also retain more equally their diameter and proper form of tread, which is a point of much value in engines with coupled wheels.

It is believed these Tires are peculiarly well adapted to freight engines, as the objection to coupling the wheels of locomotives is the *increased friction*, arising principally from the *unequal wear* of wrought tires; and hence most of the freight engines where wrought tires are used, have but *four wheels as drivers*, with frequently a weight of *sixteen tons*, or more, upon them, which may be of no disadvantage to the engine, although its effect upon the track is like a car with *sixteen tons* upon *four wheels*, and it is presumed no one would permit cars so heavily loaded to pass over their road.

As Chilled Tires wear more *uniformly* than those of wrought iron, there can be no doubt when these are used, that the weight necessary for adhesion may be distributed upon more *driving wheels*, without any material disadvantage to the engine, and thus placing *less weight* upon a *single point*, would relieve the track, and secure, to a great extent, the object sought to be gained by the plan so frequently proposed, of using *light engines*, which would bring with it the necessity of *increasing* the number of trains and train hands.

The complete success of Chilled Tires upon the Baltimore and Ohio road, for the last seven years, and upon other roads for a more subsequent period, is a strong proof of their *practical character*, while their *cheapness and durability*, it is believed, recommend their trial by every railroad company.

It may be thought by some that the *whole wheel* for strength, would be preferable to wheels with tires, but experience shows the latter to be a much *stronger and more durable wheel*, on account of its freedom from *tension*, which is never the case with a *whole wheel*. That **TENSION** has much to do with the breaking of wheels and tires, may be inferred from the fact, that a set of *chilled tires*, five feet diameter, on a first class passenger engine, have been in constant service during the past winter, on one of our Eastern roads, and have withstood the severities of the season, where *whole wheels and wrought tires* have broken. And it may be proper to remark, that wherever chilled tires have been introduced, *whole wheels as drivers* are invariably abandoned, they being far more expensive to maintain, as there is a *crank* to form as often as a wheel is renewed, which is not the case on the renewal of a tire.

The peculiar manner of *fastening* these tires to the wheel without *shrink*, applies equally well to wrought tires, and is of much importance where they are used, as it secures them against the **TENSION** or **STRAIN** they receive by the present plan of *shrinking* them to the wheels, which undoubtedly is the cause of wrought tires breaking so frequently, particularly in cold weather, which produces a greater *contraction* of the tire, thereby increasing the *strain*. This plan makes the tire perfectly secure upon the wheel, and is attended with *less expense*, as will be seen by the following testimonials, which are respectfully submitted.

Lowell, March, 1851.

L. B. TYNG.

**TESTIMONIALS.**

Baltimore and Ohio R. R. Office,  
Jan. 2, 1850.

Mr. L. B. TYNG, Lowell, Mass.—Sir: Your favor of the 26th ult., is before me, asking my opinion of the Chilled Cast Iron Tires, of Messrs. Perkins & McMahon, patentees. I do not hesitate to speak favorably of them, nor to say that I would give them the preference over wrought iron tires, whenever the adhesive tenacity of the latter to the rails is not all called for, there being somewhat less adhesion to the chilled wheel.

This can, however, scarcely be called a practical point, as nearly all of the Passenger Engines now in use have a *surplus of adhesion*, and nearly all Freight Engines being provided with the sand box, for emergencies arising from sharp curves, heavy grades or wet rails.

The Chilled Tire is very much cheaper in first cost, will last longer, and offers a facility for putting it on the wheel, rendering comparison with the wrought iron tire an absurdity—it not being necessary even to take the wheels from the machine for the purpose.—Many of them are in successful use on this road, and I consider its curves and other peculiarities the most severe of all existing tests. One set of five feet in diameter, has run 50,000 miles under one of our Passenger Engines, and will to all appearance, run as many more; and, in the mean time, they have not cost a dollar for repairs or adjustment.

It may be suggested that they might not stand a Northern frost. This is possible; but I believe otherwise, as the weather here is occasionally as severe as in Boston, and if I had charge of a northern road, after the experience I have had here, I would make their trial one of my very first acts.

Respectfully your Ob't Serv't,

WM. PARKER, General Supt., etc.

January 29, 1851.

Philadelphia, Wilm. and Balt. R. R. Office,  
Wilmington, Del.

Mr. L. B. TYNG—Sir: We have used the solid Cast Iron Chilled Wheel, and Cast Iron Chilled Tire, for engine drivers, on this road since 1842. When wrought iron tires under new engines, purchased from time to time, wear out, I invariably replace them with the Chilled Tire of Messrs. Perkins & McMahon, patentees.

These Tires will last, on the average, three times as long as wrought tires; seldom requiring renewals under three years, and lasting much longer usually. We have a set which has been in constant use for five years, and still in fair order. The adhesion supplied by the Chilled Tires, I find in practice with engines of the same model and weight, to be equal to that given by wrought tires. This is certainly a fact, though not an acknowledged one, in general. Those who think otherwise, will in time change their opinions.

I am of opinion that the Chilled Tire is as safe as the wrought, at any temperature. In eight years use, we have broken but one tire out of more than fifty, and that by a violent concussion on the occasion of a run off.

The use of the Chilled Tire, and the ease and rapidity with which it may be replaced, would certainly enable a road to do the same amount of work with fewer engines—since but little time would be lost in laying up an engine for new tires, or for turning down old ones, as must be done when wrought tires are used.

I am yours respectfully,

I. R. TRIMBLE,  
Engineer and General Supt.

Office Eastern R. R., Salem, Dec. 23, 1850.

L. B. TYNG, Esq.—Sir: Your favor of Nov. 30th, inquiring respecting the Chilled Cast Iron Tires, came duly to hand, and in answer, I will say, that this road have in use one set cast and fitted to the wheel, by Messrs. Bush & Lobdell, upon a twenty ton first class Passenger Engine, which has run in eight months, 26,639 miles, and to all appearance, are about as good as when they first commenced running.

In regard to the comparative expense of the cast or wrought iron tires, I do not hesitate to say that the difference would be vastly in favor of the former.

I have ordered a second set, and they will be put on to the engine immediately. Respectfully,  
JOHN KINSMAN, Supt. E. R. R.

Chilled Tires for the various sized wheels, or wheels with either chilled or wrought tires fitted up upon this plan, may be had of the following persons:

ALDRICH, TYNG & Co, Lowell, Mass.  
SMITH & PERKINS, Alexandria, Va.

Rights for using Tires upon the above plan, may be had on reasonable terms, of L. B. TYNG, Lowell, and at

N. York.

**Railroad Iron.**

**THE UNDERSIGNED, HAVING** made arrangements abroad, are prepared to contract for the delivery of Foreign rails, of approved brands upon the most favorable terms.

They will also make contracts for American rails, made at their Trenton works, from Andover Iron, in whole or in part, as may be agreed upon.

They are prepared to furnish Telegraph, Spring and Market Wire; Braziers and Wire Rods; Rivets and Merchant Bars to order, all made exclusively from Andover Iron. The attention of parties who require iron of the *very best quality* for special purposes, is respectfully invited.

COOPER & HEWITT,  
17 Burling Slip, New York.

February 15, 1850.

**Railroad Lanterns.**

**COPPER** and Iron Lanterns for Railroad Engines, fitted with heavy silver plated Parabolic Reflectors of the most approved construction, and Solar Argand Lamps; manufactured by

HENRY N. HOOPER & CO.,  
No. 24 Commercial St. Boston.

August, 16, 1849.

6m33

**Railroad Iron.**

**THE UNDERSIGNED ARE PREPARED TO** contract for the delivery of English Railroad Iron of favorite brands, during the Spring. They also receive orders for the importation of Pig, Bar, Sheet, etc. Iron.

THOMAS B. SANDS & CO.,  
73 New street,  
New York.

February 3, 1849.

**Glendon Refined Iron.**

Round Iron, Band Iron, Hoop Iron,  
Square " Flat " Scroll "

Axles, Locomotive Tyres,  
Manufactured at the Glendon Mills, East Boston, for sale by  
GEORGE GARDNER & CO.,  
5 Liberty Square, Boston, Mass.

Sept. 15, 1849.

3m37

**ENGINEERS.****Atkinson, T. C.,**

Mining and Civil Engineer,  
Orange and Alexandria Railroad, Alexandria, Va.

**Clement, Wm. H.,**

Little Miami Railroad, Cincinnati, Ohio.

**Cozzens, W. H.,**

Engineer and Surveyor, St. Louis, Mo.

**Alfred W. Craven,**

Chief Engineer Croton Aqueduct, New York.

**Floyd-Jones, Charles,**

Alton and Sangamon Railroad, Alton, Illinois.

**Gay, Edward F.,**

Columbia and Philadelphia Railroad, Philadelphia Pa.

**Gilbert, Wm. B.,**

Rutland and Burlington Railroad, Rutland, Vt.

**Gzowski, Mr.,**

St. Lawrence & Atlantic Railroad, Montreal, Canada.

**Grant, James H.,**

Nashville and Chattanooga R. R., Nashville, Tenn.

**S. W. Hill,**

Mining Engineer and Surveyor, Eagle River,  
Lake Superior.

**Holcomb, F. P.**

Southwestern Railroad, Macon, Ga.

**Latrobe, B. H.,**

Baltimore and Ohio Railroad, Baltimore, Md.

**Miller, J. F.,**

Buffalo and Conhocton Valley Railroad, Bath, N. Y.

**Morris, Elwood,**

Schuylkill Navigation, Schuylkill Haven, Pa.

**Nott, Samuel,**

Lawrence and Manchester Railroad, Boston,

**Osborne, Richard B.,**

Civil Engineer, Philadelphia.



**Prichard, M. B.,**  
East Tennessee and Georgia R. R., Cleveland, Tenn.

**W. Milnor Roberts,**  
Bellefontaine and Indiana Railroad, Marion, Ohio.

**Roberts, Solomon W.,**  
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

**Sanford, C. O.,**  
South Side Railroad, Virginia.

**Schlatter, Charles L.,**  
Northern Railroad (Ogdensburg), Malone, N. Y.

**Steele, J. Dutton,**  
Pottstown, Pa.

**Trautwine, John C.,**  
Civil Engineer and Architect, Philadelphia.

**Tinkham, A. W.,**  
United States Fort, Bucksport, Me.

**Troost, Lewis,**  
Alabama and Tennessee Railroad, Selma, Ala.

**Whipple, S.,**  
Civil Engineer and Bridge Builder, Utica, N. Y.

### HOTELS.

**DAVIS'S  
ALHAMBRA HALL,**  
No. 136 Pratt street,  
BALTIMORE.

**Exchange Hotel,**  
Adjoining Eastern Railroad Depot,  
BUFFALO, N. Y.  
BY.....**FISS & SPERRY,**  
Late of Delevan House, Albany.

**MANSION,**  
Corner of Maine and Exchange Streets,  
**P. DORSHIMER.** BUFFALO.

**Barnum's City Hotel,**  
MONUMENT SQUARE, BALTIMORE.  
This Extensive Establishment, erected expressly for a Hotel, with every regard to comfort and convenience, is situated in the centre and most fashionable part of the city, and but a few minutes' walk from the Railroad Depots and Steamboat Landings.  
The House has lately undergone a thorough repair, embracing many valuable improvements, and will accommodate 250 Guests. **BARNUM & CO.**

**American Hotel,**  
Pratt street, opposite the Railroad Depot,  
BALTIMORE.  
**HENRY M. SMITH.....Proprietor.**  
Late of the Exchange & St. Charles Hotels, Pittsburg

**Washington Hotel,**  
BY **JOHN GILMAN,**  
\$1 Per Day.  
No. 206 Pratt street, (near the Depot),  
BALTIMORE.

**GUY'S  
United States Hotel,**  
(Opposite Pratt street Railroad Depot),  
BALTIMORE.  
**JOHN GUY.** **WILLIAM GUY.**

**DUNLAP'S HOTEL,**  
On the European Plan,  
NO. 135 FULTON STREET,  
Between Broadway and Nassau St.,  
NEW YORK.

**JONES' HOTEL,**  
NO. 152 CHESTNUT STREET,  
PHILADELPHIA.  
**Baldens & Wazet, . . . . . Proprietors.**

**Fountain Hotel,**  
LIGHT STREET, BALTIMORE,  
**THURSTON.....Proprietor.**

### BUSINESS CARDS.

**Walter R. Johnson,**  
CIVIL AND MINING ENGINEER AND ATTORNEY FOR PATENTS. Office and Laboratory, F St., opposite the Patent office, Washington, D. C.

**Lithography.**  
**JOHN P. HALL & CO.,**  
161 Main st., Buffalo, (Commercial Advertiser Build.)  
Are prepared to execute all kinds of Lithography in good style and at reasonable rates. Particular attention will be paid to Engraving Railroad Maps, Engineer's Plans and drafts, etc., and orders in this line are respectfully solicited.

**Cumberland, (Md.) Coals for Steaming, etc.**  
ORDERS RECEIVED FOR AND FILLED  
by **J. COWLES, 27 Wall St., N. Y.**

**J. & L. Tuckerman,**  
IRON COMMISSION MERCHANTS,  
AND MANUFACTURERS OF  
ULSTER BAR & POUGHKEEPSIE PIG IRON,  
69 WEST STREET,  
NEW YORK

**Henry I. Ibbotson,**  
IMPORTER of Sheffield and Birmingham Goods.  
Also, Agent for the Manufacture of Telegraph Wire.  
218 PEARL ST., NEW YORK.

**Charles T. Jackson, M. D.,**  
STATE ASSAYER, late Geologist to Maine, Rhode Island, New Hampshire, and the United States, offers his services to his friends and the public in making any Chemical, Mineralogical or Geological researches that may be required for the improvement of Agriculture and the Manufacturing Arts. Particular attention will be paid to the exploration of mines and to assaying of ores of the metals.  
State Assayer's office, 31 Somerset st.  
Boston Sept. 3, 1850.

**STEEL AND FILES.**  
**R. S. Stenton,**  
20 CLIFF STREET, NEW YORK,  
AGENT FOR  
**J. & RILEY CARR,**  
BAILEY-LANE WORKS, SHEFFIELD,  
Manufacturers of Cast, Shear, German, Blister, and Spring Steel,  
Of all descriptions, Warranted Good.  
**FILES.**

Manufacturers of Machinists' Warranted Best Cast Steel Files, expressly for working upon Iron and Steel, made very heavy for recutting.  
A full Stock of Steel and Files at all times on hand. 6m4

**Dudley B. Fuller & Co.,**  
IRON COMMISSION MERCHANTS,  
No. 139 GREENWICH STREET,  
NEW YORK.

**Manning & Lee,**  
GENERAL COMMISSION MERCHANTS,  
NO. 51 EXCHANGE PLACE,  
BALTIMORE.  
Agents for Avalon Railroad Iron and Nail Works.  
Maryland Mining Company's Cumberland Coal 'CED'—'Potomac' and other good brands of Pig Iron.

**Samuel Kimber & Co.,**  
COMMISSION MERCHANTS  
WILLOW ST. WHARVES, PHILADELPHIA.  
AGENTS for the sale of Charcoal and Anthracite  
A Pig Iron, Hammered Railroad Car and Locomotive Axles, Force Pumps of the most approved construction for Railroad Water Stations and Hydraulic Rams, etc., etc.  
July, 27, 1849.

**James Herron, Civil Engineer,**  
OF THE UNITED STATES NAVY YARD,  
PENSACOLA, FLORIDA,  
PATENTEE OF THE  
**HERRON RAILWAY TRACK.**  
Models of this Track, on the most improved plan, may be seen at the Engineer's office of the New York and Erie Railroad.

### PLUSHES

FOR  
**Railway Cars & Omnibuses.**  
**F. S. & S. A. MARTINE,**  
112 WILLIAM ST., NEAR JOHN.  
ARE now receiving a large and complete assortment of Plain and Figured PLUSHES, of their own importation, which will be sold at the lowest market price, viz: Crimson, Maroon, Scarlet, Green, Blue, Purple, etc.  
ALSO—CURLED HAIR, the best manufactured in market.

**To Railroad Companies, Machinists, Car Manufacturers, etc., etc.**  
**CHARLES T. GILBERT,**  
NO. 80 BROAD ST., NEW YORK,  
IS prepared to contract for furnishing at manufacturer's prices—  
Railroad iron,  
Locomotive Engines,  
Passenger and Freight Cars,  
Car Wheels and Axles,  
Chairs and Spikes.  
Orders are invited; and all inquiries in relation to any of the above articles will receive immediate attention

**Manufacture of Patent Wire ROPE AND CABLES,**  
For Inclined Planes, Suspension Bridges, Standing Rigging, Mines, Cranes, Derrick, Tilters, &c., by  
**JOHN A. ROEBLING, Civil Engineer,**  
TRENTON, N. J.

**FORGING.**  
**Ranstead, Dearborn & Co.,**  
MANUFACTURERS OF  
LOCOMOTIVE CRANKS AND CAR AXLES,  
ALSO  
WROUGHT IRON SHAFTING,  
And All Kinds of Hammered Shapes.  
Office 25 Foster's Wharf, Boston.

**Samuel D. Willmott,**  
MERCHANT, AND MANUFACTURER OF  
CAST STEEL WARRANTED SAWS,  
—AND FILES—  
IMPORTER OF THE  
GENUINE WICKESLY GRINDSTONES  
NO. 8 LIBERTY STREET,  
NEW YORK.

**Railroad Instruments.**  
**THEODOLITES, TRANSIT COMPASSES,**  
and Levels, with Fraunhofer's Munich Glasses, Surveyor's Compasses, Chains, Drawing Instruments, Barometers, etc., all of the best quality and workmanship, for sale at unusually low prices, by  
**E. & G. W. BLUNT,**  
No. 179 Water St., cor. Burling Slip,  
New York, May 19, 1849.

### IRON.

**Iron.**  
Pig Iron, Anthracite and Charcoal; Boiler and Flue Iron, Spring and Blistered Steel, Nail Rods, Best Refined Bar Iron, Railroad Iron, Car Axles, Nails, Stove Castings, Cast Iron Pipes of all sizes, Railway Chairs of approved patterns for sale by  
**COLEMAN, KELTON & CAMBELL,**  
109 N. Water St., Philadelphia.

### Iron Store.

THE Subscribers, having the selling agency of the following named Rolling Mills, viz: Norristown, Rough and Ready, Kensington, Triadelphia, Pottsgrove and Thorndale, can supply Railroad Companies, Merchants and others, at the wholesale mill prices for bars of all sizes, sheets cut to order as large as 66 in. diameter; Railroad Iron, domestic and foreign; Locomotive tire welded to given size; Chairs and Spikes; Iron for shafting, locomotive and general machinery purposes; Cast, Shear, Blister and Spring Steel; Boiler rivets; Copper; Pig iron, etc., etc.  
**MORRIS, JONES & CO.,**  
Iron Merchants,  
Schnylkill 7th and Market Sts., Philadelphia.  
August 16, 1849. 1y33

**Bowling Iron. Stamped B.O.**

Railway Tire Bars  
Locomotive and other Axles  
Boiler Plates  
Rivet Iron  
Locomotive Frame do  
Bars,  
and every other description of this superior Iron.

The subscribers, agents for the sale of Bowling Iron, are prepared to execute orders for importation, especially for railway and machinery uses, with despatch from the manufacturers.

RAYMOND & FULLERTON, 45 Cliff st.

**Ibbotson, Brothers & Co's  
CELEBRATED CAST STEEL**

AND  
Best Cast Steel Royal Improved Files, well known as better adapted for Engineers' and Machinists' purposes than any now in use in the United States.

Every description of Square, Octagon, Flat and Round Cast Steel, Sheet, Shovel and Railway Spring Steel, etc., and Steel to order for any purposes—manufactured at their works in Sheffield—and universally known by the old stamp "Globe."

HENRY I. IBBOTSON, Agent,  
218 Pearl st., New York.

**Smith & Tyson,,  
IRON COMMISSION MERCHANTS,  
BALTIMORE.**

**REFINED** Juniata Charcoal Billet Iron for Wire.  
Do. for Bridging, of great strength.  
Flat Rock, Boiler and Flue Iron, rolled to pattern.  
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

**WILLIAM JESSOP & SONS'  
CELEBRATED CAST-STEEL.**

The subscribers have on hand, and are constantly receiving from their manufactory,

PARK WORKS, SHEFFIELD,

Double Refined Cast Steel—square, flat and octagon. Best warranted Cast Steel—square, flat and octagon. Best double and single Shear Steel—warranted. Machinery Steel—round.

Best and 2d gy. Sheet Steel—for saws and other purposes.

German Steel—flat and square, "W. I. & S." "Eagle" and "Goat" stamps.

Genuine "Sykes," L Blister Steel.

Best English Blister Steel, etc., etc., etc.

All of which are offered for sale on the most favorable terms by

WM. JESSOP & SONS,

91 John street, New York.

Also by their Agents—

Curtis & Hand, 47 Commerce street, Philadelphia.

Alex'r Fullerton & Co., 119 Milk street, Boston.

Stickney & Beatty, South Charles street, Baltimore.

May 6, 1848.

**Railroad Iron.**

B. O. Railway Tires, Railway Wheels,  
Scotch Pig Iron, Tin Plates and Banca Tin,  
Muntz Patent Metal Sheathing,  
Baltimore Copper.

Contracts for Rails made on behalf of the manufacturers, for delivery at any ports in the United States, at fixed prices.

Bowling Tires and Tire Bars and Scotch Pigs imported to order.

Muntz's Ship-sheathing, and a general stock of Tin Plates and Banca Tin in store, and for sale by

RAYMOND & FULLERTON, 45 Cliff st.

**IRONDALE PIG METAL, MANUFACTURED  
and for sale by the Bloomsburg Railroad Iron Co.**

LINDLEY FISHER, Treasurer.

75 N. Water St., Philadelphia.

**Car Wheel Iron.**

THE celebrated cold blast "Conowingo" Pig Iron, for Railroad Wheels, Chilled Rolls, etc., for sale by

E. PRATT & BROTHER,

Baltimore, Md.

**Railroad Iron.**

3,000 TONS C. L. MAKE 63½ lbs. per yard, now landing and to arrive.

Also contracts made for future delivery of above superior make English Iron.

300 Tons Banks Best Iron, Round, Square and Flat.

200 " English Bar " " " "

10 " 9-16 Square Iron for Railroad Spikes.

For sale in lots to suit purchasers by

DAVID W. WETMORE.

New York, March 26, 1850.

**Railroad Iron.**

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices, and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

**JOHNSON, CAMMELL & Co's  
Celebrated Cast Steel,**

AND  
ENGINEERING AND MACHINE FILES, which for quality and adaptation to mechanical uses, have been proved superior to any in the United States. Every description of square, octagon, flat and round cast steel, sheet, shovel and railway spring steel, best double and single shear steel, German steel, flat and square, goat stamps, etc. Saw and file steel, and steel to order for any purposes, manufactured at their Cyclops Steel Works Sheffield.

JOHNSON, CAMMELL & CO.,  
24 Cliff St., New York.

November 23 1849.

**Bowling Tire Bars.**

40 Best Flange Bars 5½x2 inches, 11 feet long.  
40 " " 5½x2 " 7 feet 8 in. long.  
40 " Flat " 6x2 " 11 feet long.  
40 " " 6x2 " 7 feet 8 in. long.

Now in store and for sale by

RAYMOND & FULLERTON,  
45 Cliff street.

**Wheel, Forge and Foundry  
Iron.**

LOCUST GROVE Wheel Iron of great strength and superior chilling property.

Balt. Charcoal Forge Iron, from Patuxent, Curtis Creek and Gunpowder furnaces.

Elkridge Foundry Iron, of superior strength and softness. Anthracite and Charcoal Iron from Pennsylvania and Virginia. Gas and Water Pipes, Lamp Posts from Elkridge furnace.

LEMMON & GLENN,  
62 Buchanan's Wharf, Baltimore.

\$m9

**Railroad Iron.**

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,  
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B. J. & Co. are also prepared to take contracts for English rails, delivered in any of the Atlantic ports of the United States.

**Railroad Iron.**

THE Undersigned, Agents for Manufacturers, are prepared to contract to deliver Rails of superior quality, and of any size or pattern, to any ports of discharge in the United States.

COLLINS, VOSE & CO.

New York, June 1, 1850.

**Tredegar Iron Works.**

ROLLING MILL FOUNDRY AND MACHINE SHOPS. The undersigned continues to manufacture at his Works in this city (from best charcoal

metals) Bar Iron of every description, embracing—Round and Squares, from ½ to 5 inches diameter. Flats, from ½ to 7 inches, all thicknesses.

Bands and Scrolls, all sizes. Boiler plate and Plough Iron. Railroad and Locomotive Axles and Tires. Locomotive Frames, Spikes and Plates. Hoops, Ovals, Half Ovals, Half Rounds, Angle, T, L, and indeed every description of Iron usually manufactured, all of which he warrants to be equal to any made in this country.

He also manufactures at his Foundry and Machine Shops all descriptions of Railroad Work, say, Locomotives, Railroad Wheels and Axles complete and ready for the road, Railroad Chairs, etc. Also, Marine and Stationary Engines all sizes, Sugar mills and Engines, Horse mills, and every kind of Machinery usually required for the operations of the country.

He has paid particular attention to getting up machinery, etc., for Gold Mine operations, and those in want of such work might find it to their advantage to give him a call.

J. R. ANDERSON.

Richmond, Va., Sept. 10, 1850.

**CUT NAILS OF BEST QUALITY, BAR IRON**

(including Flat Rails) manufactured and for sale by

FISHER, MORGAN & CO.,

75 N. Water St., Philadelphia.

**Car Wheel Iron.**

100 Tons "Columbia" No. 2 Cold Blast Charcoal Iron.

300 Tons "Salisbury" No. 1, do. do.

For sale by CHARLES T. GILBERT,

No. 80 Broad st.

New York, Sept. 21, 1850.

**Railroad Spikes.**

THE subscribers are prepared to make and execute contracts for Railroad Spikes of a superior quality, manufactured by the New Jersey Iron Company, at Boonton.

DUDLEY B. FULLER & CO.

139 Greenwich st. corner of Cedar.

**S. S. Keyser & Co.,  
IRON WAREHOUSE,**

Corner of South 1 and Pratt Streets,  
BALTIMORE, MD.

Selling Agents for the Rough and Ready Bar Iron and Elk Boiler and Flue Iron Rolling Mills, Sarah and Taylor Furnaces, and Wrightsville Hollow Ware Foundry, and Dealers in Bar and Sheet Iron, and Cast, Sheer, German, Blister, Spring and Electrodes Steel, etc., etc.

**Railroad Spikes, Boiler Rivets, etc.**

THE Subscribers, Agents for the sale of James S. Spencer's, Jr., Railroad and Boat Spikes, Boiler Rivets, and Wrought Iron Chairs for Railroads, made at his Works near this city, will execute all orders with promptness, despatch, and of the best quality.

ALSO IMPORTERS of English refined and Merchant bar Iron; Extra refined Car and Locomotive Axles (from 3½ to 6½ inches in diameter); B. O. Locomotive Tire (welded by Baldwin). Also, supply Boiler and Flue Iron cut to pattern or otherwise.—Spring, Shear, and Cast Steel, etc., etc., etc.

T. & E. GEORGE.

Philadelphia, November 14, 1850.

**Railroad Iron.**

THE Undersigned, Agents for Manufacturers, are prepared to contract for the delivery of English, Welsh and Scotch Rails, of any pattern and weight, also for every description of English, Welsh, Scotch, and Swedish Iron, Railway Chairs and Spikes, Rivets, Bolts, Nuts, Washers, Chain Cables, Anchors, Tin Plates, German Spelter, Iron Castings, and every description of Machinery.

WILLIAM BIRD & CO.,

Iron and Tin Plate Merchants,

44 Wall st., New York.

And at 5 Martin's Lane, City, London,

and 140 Buchanan st. Glasgow.

July 27th, 1850.

**Railroad Spikes, Wrought  
Chairs and Fastenings.**

THE subscribers continue to manufacture, with increased facilities, Hook and Flat Head Railroad Spikes and Chairs. The points being FINISHED BY HAND, have a long taper, and sharp point, and are much superior to those made entirely by machinery.

We are also prepared to furnish Wrought Chairs, Clamps and Fastenings of every description, either punched or plain. The best quality of refined iron is used in the above articles, and our prices will be made as favorable as any in the country.

The patent Clinch Spike will be found an improvement to secure the rail at the joints.

They drive in the manner shown and are not liable to work loose.

All communications, addressed to the undersigned, will meet with prompt attention.

SMITH & TYSON,

No. 25 South Charles st., Baltimore Md.

**Railroad Iron.**

THE "Montour Iron Company" is prepared to execute orders for Rails of the usual patterns and weights, and of any required length not exceeding 30 feet per rail. Apply at the office of the Company,

No. 73 South 4th st., Philadelphia,

Or to the Agents,

CHOUTEAU, MERLE & SANFORD,

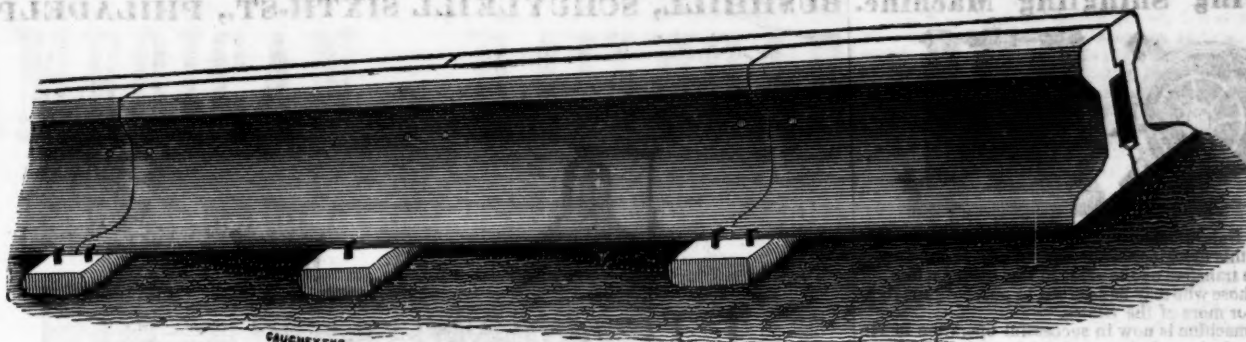
No. 51 New st., New York.

September, 1850.





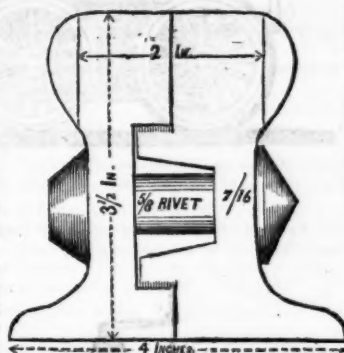
## PATENT COMPOUND RAIL.



**THE UNDERSIGNED NOW OFFER TO THE** Railroad Public a new Compound Railroad Bar, which possesses, as they believe, a decided superiority over every kind now in use. The Cuts annexed will give a good idea of the form of the Rail, and the mode of combination.

This Rail has now been in use on the New York and Erie and the Utica and Schenectady Railroads for nearly two years, and has proved itself to be a *durable and continuous* rail, realizing the advantages of a theoretically perfect rail, over the one in common use. We invite the attention of Railroad Companies to a careful examination of the merits of the form now offered.

The advantages of this Rail are: first, it effects a saving of from 25 to 50 per cent. in the wear and tear of the machinery; secondly, it saves to a vastly greater extent in the repairs of track; thirdly, it secures a much higher rate of speed with the same power; and what is of still



greater importance, it offers complete protection against most of the accidents to which companies are liable. For these reasons, it is believed to be not only the best, but the cheapest rail that can be used. In enumerating its advantages, the proprietors only repeat the statements of competent persons, who have had the best opportunities of judging of its merits.

This improved Rail is now being manufactured at the Works of the Mount Savage Iron Co. in Maryland. Any communications or enquiries addressed to either of the undersigned will receive prompt attention.

J. F. WINSLOW, President,  
Troy, N. Y.  
ERASTUS CORNING, Albany.  
WARREN DELANO, Jr., N. Y.  
JOHN M. FORBES, Boston.  
ENOCH PRATT, Baltimore.

April 8, 1851.

### Fagotted Car and Engine Axles

**FORGED** by RANSTEAD, DEARBORN & Co., Boston, Mass. These Axles enjoy the highest reputation for excellence, and are all warranted.

**TO RAILROAD COMPANIES, CAR MANUFACTURERS, etc.**

**THE** Undersigned hereby gives public notice, that the Commissioner of Patents, pursuant to his decision in relation thereto, on the 8th day of October, 1850, issued to him a Patent for the sole right to manufacture, and exclusive use of the INDIA RUBBER CAR SPRING, on account of priority of invention of said Spring. F. M. RAY.

New York, Oct. 23, 1850.

### Iron Trade of Pennsylvania.

**DOCUMENTS** and Statistics relating to the Manufacture of Iron in the State of Pennsylvania—giving a history of the manufacture from its commencement to this date, illustrated by diagrams. Also tables giving the address and capacity of every establishment in the State. Prepared by direction of the late convention of the trade held in Philadelphia. For sale by

LINDSAY & BLACKISTON, Philadelphia.  
FIELDING LUCUS, Jr., Baltimore.  
HENRY G. NICHOLS, 79 Water st., N. Y.  
or at this office—price \$1 00.

It will be sent by mail to any order enclosing the money, and post paid.

### Ulster Iron.

**THE ULSTER IRON WORKS**, Saugerties, N. Y., continue in full operation. Orders for round, square, flat, band, hoop and scroll iron, will be received and promptly executed by

J. & L. TUCKERMAN,  
69 West St., New York.

### Railway Iron.

**THE** Subscribers will contract to deliver, in the course of the ensuing Spring and Summer, the best English Rails, made by a particular specification, and of any pattern required.

DAVIS, BROOKS & CO.,  
68 Broad st.

On hand for sale, English rails of 59 lbs. to the yard, made by particular specifications.  
January 10, 1851. 2m

### Railroad Iron.

**THE MOUNT SAVAGE IRON WORKS**, Alleghany county, Maryland, having recently passed into the hands of new proprietors, are now prepared, with increased facilities, to execute orders for any of the various patterns of Railroad Iron. Communications addressed to either of the subscribers will have prompt attention. J. F. WINSLOW, President

Troy, N. Y.  
ERASTUS CORNING, Albany  
WARREN DELANO, Jr., N. Y.  
JOHN M. FORBES, Boston.  
ENOCH PRATT, Baltimore, Md

November 6, 1848.

### Railroad Iron.

**THE SUBSCRIBERS ARE PREPARED TO** take orders for Railroad Iron to be made at their Phoenix Iron Works, situated on the Schuylkill River, near this city, and at their Safe Harbor Iron Works, situated in Lancaster County, on the Susquehanna river; which two establishments are now turning out upwards of 1800 tons of finished rails per month.

Companies desirous of contracting will be promptly supplied with rails of any required pattern, and of the very best quality.

REEVES, BUCK & CO.  
45 North Water St. Philadelphia;

March 15, 1849.

### LAP—WELDED WROUGHT IRON TUBES

FOR

**TUBULAR BOILERS,**  
FROM ONE AND A QUARTER TO SEVEN  
INCHES IN DIAMETER.

**THE ONLY** Tubes of the same quality and manufacture as those so extensively used in England Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER & SON, Patentees,  
28 Platt street, New York.

### AMERICAN PIG IRON.

“POUGHKEEPSIE” brand, Dutchess Co., N. Y.  
“GLENDALE” brand, Lehigh county, Pa.  
Orders for the above two well known brands will be received, and promptly executed, by

J. & L. TUCKERMAN,  
69 West St., New York.

### American Cast Steel.

**THE ADIRONDAC STEEL MANUFACTURING CO.** is now producing, from American iron, at their works at Jersey City, N. J., Cast Steel of extraordinary quality, and is prepared to supply orders for the same at prices below that of the imported article of like quality. Consumers will find it to their interest to give this a trial. Orders for all sizes of hammered cast steel, directed as above, will meet with prompt attention.

May 28, 1849.

**PATENT-HAMMERED RAILROAD, SHIP & BOAT SPIKES.**—The Albany Iron Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscribers at the works will be promptly executed.

JOHN F. WINSLOW, Agent,  
Albany Iron and Nail Works, Troy, N. Y.  
The above Spikes may be had at factory prices, of Erastus Corning & Co Albany; Merritt & Co., New York; E. Pratt & Br>er, Baltimore, Md

### Stickney & Beatty, DEALERS IN IRON AND IRON MANUFACTURERS.

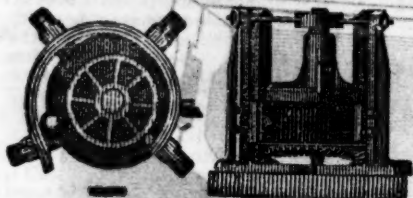
**AGENTS** for the Baltimore City Rolling Mill, (Works of Messrs. Ellicott) also agents for the sale of the Laurel, Locust Grove and Gunpowder (Balt.) Forge Pig Irons; Hays's Cold Blast Columbia Wheel Iron, Fort and anti-Eatam Pig Irons, Caledonia, Columbia and Capon Cold Blast Boiler Blooms, warranted; Wm. Jessop & Son's Steel; Old Colony and anti-Eatam Nails; Bar Iron, Boiler Plates, Hoop, Sheet, Oval, Half Oval, Horse Shoe and other Iron. Exchange Place, Baltimore.

### Railroad Iron.

**2000** Tons, weighing 59 pounds per lineal yard, of the most approved pattern of T rails, in store and to arrive, for sale by

COLLINS, VOSE & CO.,  
74 South St.

New York, June 1, 1850.

**MACHINERY.****Henry Burden's Patent Revolving Shingling Machine.**

THE Subscriber having recently purchased the right of this machine for the United States, now offers to make transfers of the right to run said machine, or sell to those who may be desirous to purchase the right for one or more of the States.

This machine is now in successful operation in ten or twelve iron works in and about the vicinity of Pittsburgh, also at Phoenixville and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous: considerable saving in first cost; saving in power; the entire saving of shingler's, or hammerman's wages, as no attendance whatever is necessary, it being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from sixty puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of staffs, as none are used or required. The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal as under the hammer. The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery. The bars roll sounder, and are much better finished. The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated. For further particulars address the subscriber at Troy, N. Y.

P. A. BURDEN.

**Railroad Spikes and Wrought Iron Fastenings.**

THE TROY IRON AND NAIL FACTORY, exclusive owner of all Henry Burden's Patented Machinery for making Spikes, have facilities for manufacturing large quantities upon short notice, and of a quality unsurpassed.

Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad fastenings, also made to order. A full assortment of Ship and Boat Spikes always on hand.

All orders addressed to the Agent at the Factory will receive immediate attention.

P. A. BURDEN, Agent,  
Troy Iron and Nail Factory, Troy, N. Y.

**CHILLED RAILROAD WHEELS.**—THE UNDERSIGNED are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the hubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,  
Willow St., below 13th,  
Philadelphia, Pa.

**Brown's Old Established SCALE WARE HOUSE,**  
NO. 234 WATER ST., NEW YORK.

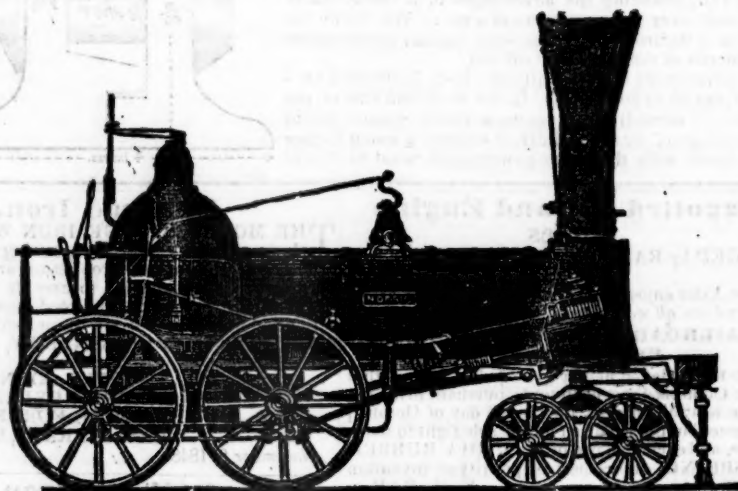
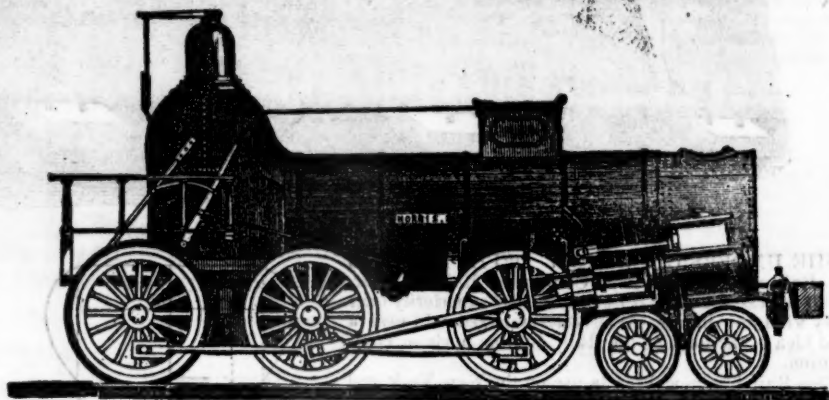
THE Subscriber, Practical Manufacturer of Scales of every description, respectfully asks the attention of Railroad Companies to his Improved Wrought Iron Railroad Track and Depot Scales which for strength, durability, accuracy, convenience in weighing, and beauty of workmanship, are not surpassed by any others in this country.

He is aware that this is rather a bold assertion for him to make, yet he can say with confidence that they have but to be tried to give them precedence over all others.

J. L. BROWN.

Bank Scales made to order, and all Scales of his make Warranted in every particular.

References given if required

**NORRIS' LOCOMOTIVE WORKS.**  
BUSHHILL, SCHUYLKILL SIXTH-ST., PHILADELPHIA,

THE UNDERSIGNED Manufacture to order Locomotive Steam Engines of any plan or size. Their shops being enlarged, and their arrangements considerably extended to facilitate the speedy execution of work in this branch, they can offer to Railway Companies unusual advantages for prompt delivery of Machinery of superior workmanship and finish.

Connected with the Locomotive business, they are also prepared to furnish, at short notice, Chilled Wheels for Cars of superior quality.

Wrought Iron Tyres made of any required size—the exact diameter of the Wheel Centre, being given, the Tyres are made to fit on same without the necessity of turning out inside.

Iron and Brass castings, Axles, etc., fitted up complete with Trucks or otherwise.

NORRIS, BROTHERS

**PATENT MACHINE MADE HORSE-SHOES.**

The Troy Iron and Nail Factory have always on hand a general assortment of Horse Shoes, made from Refined American Iron.

Four sizes being made, it will be well for those ordering to remember that the size of the shoe increases as the numbers—No. 1 being the smallest.

P. A. BURDEN, Agent,  
Troy Iron and Nail Factory, Troy, N. Y.

**Etna Safety Fuse.**

THIS superior article for igniting the charge in wet or dry blasting, made with DUPONT'S best powder, is kept for sale at the office and depot of

REYNOLDS & BROTHER,

Sole Manufacturers,  
No. 85 Liberty St.  
NEW YORK.

And in the principal cities and towns in the U. States.

The Premium of the AMERICAN INSTITUTE was awarded to the Etna Safety Fuse at the late Fair held in this city.

November 3, 1849.

ly

**UNION WORKS,**

North street, opposite the Railroad Depot,  
BALTIMORE.

**Poole & Hunt,**

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up Arrangements of Wrought Iron Pipes for heating buildings and conveying steam or water. Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

**Patent Machine Picket Fence**

SIX DIFFERENT STYLES of this fence are now made by patent machinery; and is by far the most economical fence for Railroads, Farms, Yards, etc., ever yet offered to the public, costing only from 4 to 30 cents per foot, according to pattern; and is so put up as to be shipped at a trifling expense. Full particulars will be furnished, by addressing the subscriber, to whom all orders should be sent.

N. STRATTON, Troy, N.Y.